



# ACIDIC PRECIPITATION IN ONTARIO STUDY

## ANNUAL STATISTICS OF CONCENTRATION AND DEPOSITION-CUMULATIVE PRECIPITATION MONITORING NETWORK, 1981

August 1983

ARB-102-83-ARSP

APIOS-008/83

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K57  
1983



Ontario

Ministry  
of the  
Environment

The Honourable  
Andrew S. Brandt  
Minister

Dr. Allan E. Dyer  
Deputy Minister

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**ACIDIC PRECIPITATION IN ONTARIO STUDY**

**ANNUAL STATISTICS OF  
CONCENTRATION AND DEPOSITION - CUMULATIVE  
PRECIPITATION MONITORING NETWORK, 1981**

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**August 1983**

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	Attawapiskat	28
	Bear Island	24
	Campbellford	13
	Colchester	01
	Coldwater	12
	Dalhousie Mills	16
	Dorion	31
	Dorset	20
	Ear Falls	35
	Exp. Lakes Area	34
	Golden Lake	17
	Gowganda	25
	Huron Park	06
	Kaladar	14
	Killarney	23
	Mattawa	22
	McKellar	21
	Merlin	02
	Milton	10
	Moonbeam	27
		41
		45
		49
		53
		57
		61
		65
		69
		73
		77
		81
		85
		89
		93
		97
		101
		105
		109
		113
		117
		121



**PART V SUMMARY STATISTICS OF OBSERVED CONCENTRATION BY STATION - Continued** Page

<u>Station</u>	<u>Map Ref. No.</u>	
Nakina	30	125
Palmerston	08	129
Pickle Lake	36	133
Port Stanley	03	137
Quetico Centre	32	141
Ramsey	26	145
Shallow Lake	09	149
Smith's Falls	15	153
Uxbridge	11	157
Waterloo	07	161
Whitney	19	165
Wilberforce	18	169
Wilkesport	04	173

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Central Region	177
Northeastern Region	181
Northwestern Region	185
Southeastern Region	189
Southwestern Region	193

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<u>Station</u>	<u>Map Ref. No.</u>	
Alvinston	05	197
Attawapiskat	28	201
Bear Island	24	205
Campbellford	13	209
Colchester	01	213
Coldwater	12	217
Dalhousie Mills	16	221
Dorion	31	225
Dorset	20	229
Ear Falls	35	233
Exp. Lakes Area	34	237
Golden Lake	17	241
Gowganda	25	245
Huron Park	06	249
Kaladar	14	253
Killarney	23	257
Mattawa	22	261
McKellar	21	265
Merlin	02	269
Milton	10	273
Moonbeam	27	277

**PART VII SUMMARY STATISTICS OF OBSERVED DEPOSITION  
BY STATION - Continued**

Page

<u>Station</u>	<u>Map Ref. No.</u>	
Nakina	30	281
Palmerston	08	285
Pickle Lake	36	289
Port Stanley	03	293
Quetico Centre	32	297
Ramsey	26	301
Shallow Lake	09	305
Smith's Falls	15	309
Uxbridge	11	313
Waterloo	07	317
Whitney	19	321
Wilberforce	18	325
Wilkesport	04	329

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BY REGION**

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Southwestern Region	349

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Northwestern Region	355
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Southwestern Region	357

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Northeastern Region	359
Northwestern Region	360
Southeastern Region	361
Southwestern Region	362

**PART I**  
**INTRODUCTION**

## INTRODUCTION

The graphical and statistical summaries presented in this report pertain to the 1981 analytical results obtained from the Acidic Precipitation in Ontario Study (APIOS) cumulative precipitation monitoring network (see network overview report, #ARB-15-82-ARSP). The relevant data are listed in a previous report, #ARB-53-83-ARSP. During 1981, the period of collection was monthly, however, a 28-day accumulation period was adopted as of January 5, 1982. All available data are utilized with the following modifications. Results reported as being unreliable or approximate are not included in the calculations. If it is noted that the actual result is greater than the reported value due to exceedance of upper analytical limit, then the reported value is also excluded. Reported results for metals which have missing leach analysis are also excluded from statistical analysis. If a detection limit is reported, a value corresponding to one half the detection limit is utilized for statistical calculations as reported in the statistical summaries. The reported cumulative precipitation gauge depth (or Environment Canada's CLIMAT result) is utilized in the calculation of deposition. If a precipitation gauge value is not available, then the collected sample volume is converted to its equivalent precipitation depth and is used in the deposition calculation.

The Bar/Stem.Leaf charts presented in Parts III and IV are obtained from the SAS (Statistical Analysis System) Univariate procedure, SAS User's Guide 1979 Edition. The charting procedure optimizes as to what chart type to produce. Optimization is based upon sample size and range. The Stem.Leaf chart is the preferred type since it has the advantage of presenting more significant figures than the Bar chart. The Bar charts are self explanatory. The Stem.Leaf charts may best be explained by an elementary example.

Example of Stem.Leaf Chart: Conductance umho/cm

Stem	Leaf	#
2	<u>555556666778999</u>	15
	multiply stem.leaf by 10***01	

This chart would be interpreted as follows: of the 15 reported values, 5 results are equal to  $2.5 \times 10$  umho/cm, 4 results are equal  $2.6 \times 10$  umho/cm, 2 results are equal  $2.7 \times 10$  umho/cm, 1 result is equal  $2.8 \times 10$  umho/cm and 3 results are equal  $2.9 \times 10$  umho/cm. It should be noted however that all the original significant figures may not be represented.

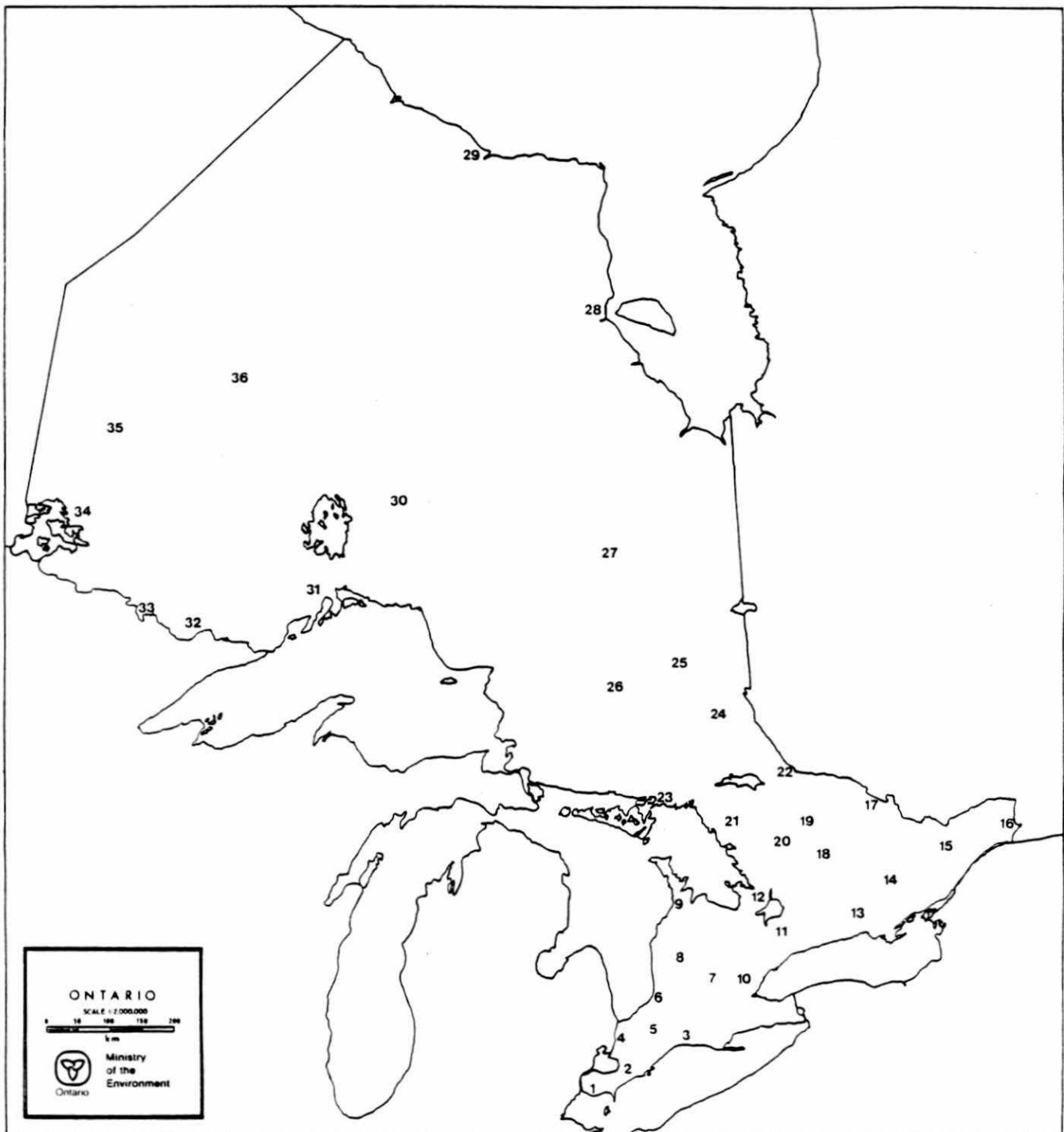
The statistical summaries presented in Parts V to VIII include mean (arithmetic/geometric), standard deviation (arithmetic/geometric), sample size, maximum, minimum, quartiles and volume weighted averages using precipitation gauge depths where appropriate. Users may assess the meaning of the statistical summaries in light of the sample distributions given in Parts IX and X.

The distribution of the observed concentrations and depositions is examined by calculating the skewness, kurtosis and D-statistic of the observed results and log-transformed observed results. The D-statistic is calculated by SAS when the sample size is greater than 50. Ideal skewness and kurtosis for a normal distribution are 0 and 3 respectively. Skewness is considered to be significant if calculated to be less than -1 or greater than +1. The Kolomogorov-Smirnov D-statistic is calculated and compared to a critical value. If the D-statistic exceeds the critical value then the null hypothesis of normality is rejected. In this report, the 95% confidence level is used. It is apparent from this analysis that the data more closely represent a log-normal distribution. This is indicated by a reduction in the calculated D-statistic when a log-transformation is introduced. In some instances however, the calculated D-statistic is not sufficiently lowered so as to pass the normality criterion. This may well be attributed to abnormalities at the ends of the distribution such as having a few extreme outliers or excessive values at the detection limit. In such instances it may be appropriate to use alternative methods for estimation of the sample mean and standard deviation which are insensitive to abnormalities in the extreme ends of the distribution. The median (m) and scale (s) of the distribution of log-transformed data may be used to estimate the sample mean ( $\mu$ ) and sample standard deviation ( $\sigma$ ) respectively. These alternative estimators would be calculated as follows:  $m$  = second quartile and  $s = 0.740$  (third quartile - second quartile). In the reported data listings for the metals nickel and vanadium, over 50% of the reported results, are below the detection limit.

**PART II**

**STATION DESCRIPTION AND LOCATION MAP**

STATION LOCATION MAP  
CUMULATIVE PRECIPITATION MONITORING NETWORK



- |                  |                      |                   |                      |
|------------------|----------------------|-------------------|----------------------|
| 1 - COLCHESTER   | 11 - UXBRIDGE        | 21 - MCKELLAR     | 31 - DORION          |
| 2 - MERLIN       | 12 - COLDWATER       | 22 - MATTAWA      | 32 - QUETICO CENTRE  |
| 3 - PORT STANLEY | 13 - CAMPBELLFORD    | 23 - KILLARNEY    | 33 - LAC LA CROIX    |
| 4 - WILKESPORT   | 14 - KALADAR         | 24 - BEAR ISLAND  | 34 - EXP. LAKES AREA |
| 5 - ALVINSTON    | 15 - SMITH'S FALLS   | 25 - GOWGANDA     | 35 - EAR FALLS       |
| 6 - HURON PARK   | 16 - DALHOUSIE MILLS | 26 - RAMSEY       | 36 - PICKLE LAKE     |
| 7 - WATERLOO     | 17 - GOLDEN LAKE     | 27 - MOONBEAM     |                      |
| 8 - PALMERSTON   | 18 - WILBERFORCE     | 28 - ATTAWAPISKAT |                      |
| 9 - SHALLOW LAKE | 19 - WHITNEY         | 29 - WINISK       |                      |
| 10 - MILTON      | 20 - DORSET          | 30 - NAKINA       |                      |

APIOS CUMULATIVE PRECIPITATION STATION DESCRIPTION

MOE REGION	STATION NAME	ELEVATION (m above MSL)	LATITUDE (North)	LONGITUDE (West)	UTM COORDINATES (Northing) (Easting)	
Central	Campbellford	175	44°17'28"	77°47'33"	4907600	277150
	Coldwater	280	44°37'31"	79°32'08"	4942200	615900
	Dorset	320	45°13'26"	78°55'52"	5009650	662400
	Milton	221	43°31'05"	79°55'54"	4818600	586350
	Uxbridge	244	44°12'46"	79°12'38"	4896800	643000
	Wilberforce	396	45°00'54"	78°12'58"	4988150	719400
Northeastern	Attawapiskat	9	52°56'00"	82°24'00"	NA	NA
	Bear Island	305	46°58'22"	80°04'40"	5202400	570350
	Gowganda	343	47°39'04"	80°46'32"	5277300	516600
	Killarney	183	45°59'26"	81°02'18"	5092900	462200
	Mattawa	198	46°16'45"	78°49'19"	5127150	667800
	McKellar	244	45°30'57"	79°55'19"	5040600	583950
	Moonbeam	244	49°19'16"	82°08'46"	5463600	416650
	Ramsey	427	47°26'33"	82°20'14"	5254900	399200
	Whitney	412	45°32'21"	78°15'35"	5045950	713950
Northwestern	Dorion	244	48°50'33"	88°36'45"	5410800	382150
	Ear Falls	350	50°38'31"	93°13'13"	5609800	484150
	Exp. Lakes Area	123	49°39'22"	93°43'28"	5500950	447350
	Nakina	320	50°10'38"	86°42'40"	5558150	520950
	Pickle Lake	360	51°27'41"	90°12'04"	5704800	694550
	Quetico Centre	420	48°44'24"	91°12'08"	5399750	632100
Southeastern	Dalhousie Mills	69	45°19'00"	74°28'13"	5018100	541550
	Golden Lake	160	45°36'48"	77°12'03"	5053200	328400
	Kaladar	244	44°41'31"	77°09'18"	4950800	329250
	Smith's Falls	122	44°56'41"	75°57'48"	4977100	423950
Southwestern	Alvinston	221	42°49'36"	81°50'04"	4942000	431550
	Colchester	183	41°59'15"	82°55'41"	4650000	340300
	Huron Park	250	43°17'28"	81°30'03"	4793000	459350
	Merlin	191	42°14'47"	82°13'30"	4676400	398950
	Palmerston	389	43°48'19"	80°54'12"	4850050	507750
	Port Stanley	213	42°40'22"	81°09'55"	4724050	486700
	Shallow Lake	229	44°34'54"	81°00'24"	4936200	492850
	Waterloo	343	43°28'39"	80°35'09"	4813750	533500
	Wilkesport	183	42°42'11"	82°21'13"	4728350	389150



### **PART III**

#### **BAR/STEM.LEAF CHARTS OF OBSERVED CONCENTRATION BY REGION**

# BAR/STEM. LEAF CHARTS OF OBSERVED CONCENTRATION

## CENTRAL REGION

STEM	LEAF	#
21	0	1
20	0	1
19		
18		
17		
16		
15		
14	000	3
13		
12	00	2
11		
10	55	2
9		
8	00	2
7		
6	055	3
5	000055555	9
4	0555	4
3	05	2
2	0000005	7
1	0005555	7
0	2222555	8

Magnesium  
mg N/l

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
12	8	1
12	1	1
11		
11	1	1
10		
10	4	1
9	7	1
9	3	1
8		
8	002	3
7	5677	4
7	0123	4
6	679	3
6	000144	6
5	55567789	8
5	11244	5
4	78899	5
4	2244	4
3	7899	4
3	012	3
2	67889	5
2	1	1

Nitrate  
mg N/l

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
7	14	2
6	59	2
6	0022	4
5	68	2
5	002233	6
4	567778	6
4	1334444	7
3	5888	4
3	00233	5
2	55667889	8
2	004	3
1	6888999	7
1	24	2
0	56	2
0		

Sulphate  
mg/l

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
16	0	1
15	278	3
14	06	2
13	24	2
12	00089	5
11	03	2
10	004	3
9	001112469	9
8	2222379	7
7	12347	5
6	12499	5
5	22	2
4	7	1
3	1344478	7
2	9	1

Total Hydrogen  
mg/l

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
52	44	2
51		
50		
49		
48	0	1
47		
46	26	2
45	469	3
44	123399	6
43	1222458	7
42	011345778889	12
41	06777	5
40	33466899	8
39	0599	4
38	689	3

Lab pH

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
7	2	1
6		
6	34	2
5	89	2
5	04	2
4	5677	4
4	03444	5
3	5577789	7
3	1133344	7
2	6667789999	10
2	002333444	9
1	67899	5

Conductance  
mmho/cm

MULTIPLY STEM.LEAF BY 10\*\*-01

BAR/STEM. LEAF CHARTS OF OBSERVED CONCENTRATION

CENTRAL REGION

STEM	LEAF	#
14	1	1
13		
13	Ammonium	
12	mg N/l	
12		
11		
11		
10	68	2
10	4	1
9	8	1
9	01	2
8		
8	24	2
7	5689	4
7	2	1
6	6669	4
6	03	2
5	677	3
5	133	3
4	9	1
4	0012233	7
3	55578	5
3	02	2
2	566779	6
2	34	2
1	566666799	9
1	3	1

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
16	0	1
15	5	1
14	8	1
13	7	1
12	5	1
11	18	2
10	137	3
9	05	2
8	34445	5
7	458	3
6	1268	4
5	002788	6
4	023455889	9
3	0567	4
2	0045588	7
1	8	1

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	56	2
5	3	1
4		
4		
3		
3		
2	5	1
2	1	1
1	5567777	7
1	0001233	7
0	5556677789999	13
0	01112222223333333334444	25

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
40	0	1
38		
36	Potassium	
34	mg/l	1
32	0	1
30		
28		
26		
24		
22		
20		
18		
16		
14	000	3
12		
10	00	2
8	00	2
6	0000	4
4	000000000000	12
2	000000000000000	17
0	00000000000	11

MULTIPLY STEM.LEAF BY 10\*\*-02

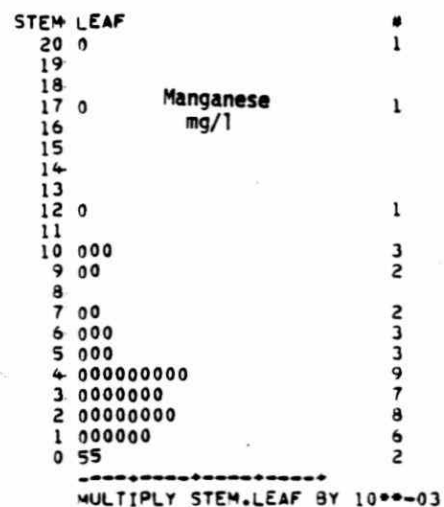
STEM	LEAF	#
8	04	2
7		
6	Chloride	
6	mg/l	
5		
5	00	2
4	88	2
4	04	2
3	67	2
3		
2	667889	6
2	12	2
1	556667777899	12
1	002233444444444	14
0	56888899	8
0	44	2

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
12	2	1
11		
10		
9		
8	46	2
7	0378	4
6	6	1
5	248	3
4	36779	5
3	01234489	8
2	222366789	9
1	0000123466688888	16
0	57	2

MULTIPLY STEM.LEAF BY 10\*\*-01

## CENTRAL REGION



BAR/STEM. LEAF CHARTS OF OBSERVED CONCENTRATION

CENTRAL REGION

STEM	LEAF	#
13	28	2
12	69	2
11	2	1
10	22	2
9	133	3
8	11377	5
7	9	1
6	2238889	7
5	122244689	9
4	2568889	7
3	227789	6
2	24689	5
1	6	1
0	66	2

Free Hydrogen (Lab)  
mg/l

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
24	3	1
22	5	1
20		
18		
16		
14	5	1
12		
10		
8	033	3
6	201668	6
4	0333777839	10
2	234770256	9
0	4667899112336679	16

Aluminum  
mg/l

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
14	0	1
13		
12		
11		
10		
9		
8		
7		
6		
5		
4		
3		
2	9	1
1	4	1
0	000000000000001111111111222222222223333344668	48

Cadmium  
mg/l

MULTIPLY STEM.LEAF BY 10\*\*-03

STEM	LEAF	#
20	8	1
19		
18		
17		
16		
15		
14		
13		
12	2	1
11	8	1
10		
9		
8	015	3
7	0	1
6		
5	0	1
4	08	2
3	000133467788	12
2	03467899	8
1	00000002458	11
0	8888888	7

Copper  
mg/l

MULTIPLY STEM.LEAF BY 10\*\*-03

STEM	LEAF	#
10	4	1
9		
8	2	1
7	5	1
6		
5	7	1
4	8	1
3	558	3
2	24	2
1	55	2
0	2	1
	1569	3
	1000011222222234	16
	055555667788	11
	001223444	9

Total Phosphorus  
mg/l

MULTIPLY STEM.LEAF BY 10\*\*-02

# BAR/STEM. LEAF CHARTS OF OBSERVED CONCENTRATION

## NORTHEASTERN REGION

STEM	LEAF	#
6	5	1
5		
5	02	2
4	2	1
3	55	2
3	1	1
2	5677	4
2	0000122233	11
1	5556668889	11
1	0000000001111122223444	23
0	55555667788888999	17
0	001112223344444444	18

-----

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
9	6	1
9	0	1
8		
8	24	2
7		
7	02	2
6	5789	4
6	1112344	7
5	566	3
5	00002224	8
4	56678	5
4	0001122234	10
3	55566678899	12
3	01224	5
2	66677888889999	15
2	044	3
1	566677888	9
1	012224	6
0		
0	3	1

-----

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
25	0	1
24		
23	0	1
22		
21		
20		
19		
18		
17		
16	0	1
15	2	1
14		
13		
12		
11		
10		
9		
8		
7	5	1
6		
5	258	3
4	27	2
3	2258	4
2	0000022255	10
1	000000011122445557888888	24
0	1112222333334444445555667777888899	35

-----

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
6	0	1
5		
5	02234	5
4	5566	4
4	011122	6
3	56788899	8
3	000122244	9
2	56677788999	12
2	000000223333444	15
1	55666666778888899	17
1	0122222333344	14
0	69	2
0	3	1

-----

STEM	LEAF	#
9	5	1
9	3	1
8	5	1
8	2	1
7	578	3
7	4	1
6		
6	000	3
5	5	1
5	2	1
4	9	1
4	24	2
3	888	3
3	0033	4
2	568	3
2	000112244	9
1	56666678889999	14
1	00122222333344	15
0	56666666777778889999	20
0	2444	4

-----

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
16	6	1
15		
14	0	1
13	1449	4
12	118	3
11	47	2
10	12333457899	11
9	1245567789	10
8	12344666677899	14
7	123457799	9
6	03356788999	11
5	012688999	9
4	689	3
3	11444667	8
2	89	2

-----

MULTIPLY STEM.LEAF BY 10\*\*-02

BAR/STEM. LEAF CHARTS OF OBSERVED CONCENTRATION

## NORTHEASTERN REGION

[illegible]

```

STEM LEAF
50 0 1
48
46
44 Sodium
42 mg/l
40
38
36
34
32 0 1
30
28
26
24 0 1
22 0 1
20
18 00 2
16
14 000 3
12 0000 4
10 000 3
8 00000000 8
6 0000000 7
4 00000000000000000000 20
2 00000000000000000000 22
0 55500000 9
-----+-----
MULTIPLY STEM.LEAF BY 1000-02

```

```

STEM LEAF      #
54 7            1
53 9            1
52              Lab pH
51 2            1
50 8            1
49
48 379          3
47 2278         4
46 12559        5
45 015677       6
44 001111255679 12
43 0023344459  10
42 0033455556667788 16
41 002233355557779 15
40 1146778      7
39 66789        5
-----
MULTIPLY STEM.LEAF BY 10**01

```

BAR/STEM. LEAF CHARTS OF OBSERVED CONCENTRATION

NORTHEASTERN REGION

STEM	LEAF	#
36	00	2
34	0	1
32	05	2
30		
28	0	1
26		
24	0	1
22		
20	00	2
18	0	1
16	0005	4
14	0005500	7
12	0055500	7
10	005505	6
8	0000055	7
6	000005550055	12
4	0000000000555	13
2	005555	6
0	555	3

-----

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
22	1	1
21		
20		
19	00	2
18	8	1
17		
16		
15	06	2
14		
13	459	3
12	35	2
11	011346	6
10	134	3
9	123334456	9
8	0023599	7
7	14788	5
6	02223335678	11
5	0111344445678	13
4	0012333378899	13
3	00112224555558	14
2	0012356778	10
1	24489	5

-----

MULTIPLY STEM.LEAF BY 10\*\*\*01

STEM	LEAF	#
36	00	2
34	0	1
32	0	1
30		
28		
26		
24		
22	000	3
20		
18		
16		
14		
12	00	2
10	00000	5
8	0000000	7
6	00000000	8
4	0000000000000	13
2	00000000000000000000000000000000	31
0	5550000000000	13

-----

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
54	5	1
52	5	1
50	0	1
48	06	2
46		
44	8	1
42	65	2
40	7	1
38	036	3
36	539	3
34		
32	2450	4
30	15089	5
28	5066	4
26	02669027	8
24	0262459	7
22	255670126888	12
20	5156	4
18	40359	5
16	538	3
14	048	3
12	33453444	8
10	606	3

-----



STEM	LEAF	#
21	0	1
20		
19	Manganese	
18	mg/l	
17	0	1
16	0	1
15		
14	00	2
13	0	1
12	0	1
11		
10	0	1
9	0	1
8	00	2
7	0000	4
6	0	1
5	0000	4
4	0000000000	9
3	00000000000000	13
2	00000000000000	13
1	000000000000	11
0	555555	7

-----+-----  
MULTIPLY STEM.LEAF BY 10\*\*-03

BAR/STEM. LEAF CHARTS OF OBSERVED CONCENTRATION

## NORTHEASTERN REGION

STEM	LEAF		
14	0		1
13			
13		Cadmium	
12		mg/l	
12	0		1
11			
11			
10			
10			
9			
9	0		1
8			
8	0		1
7			
7	00		2
6			
6	00		2
5			
5	00		2
4			
4	00000		5
3			
3	00000000000		11
2			
2	000000000000		12
1			
1	0000000000		10
0	555555555555555555555555555555		26
0			

MULTIPLY STEM.LEAF BY 100004

STEM	LEAF		#
11	00		2
10	57		2
10	2	Free Hydrogen (Lab)	1
9	88	mg/l	2
9	1		1
8	557		3
8	3		1
7	6699		4
7	1111444		7
6	5888		4
6	33		2
5	5556666899		10
5	002244		6
4	5666778		7
4	001		3
3	55589999		8
3	1224		4
2	57788		5
2	0224		4
1	57799		5
1	33		2
0	88		2
0	34		2

-----+

MULTIPLY STEM.LEAF BY 10\*\*02

MULTIPLY STEM.LEAF BY 1000-02

STEM	LEAF	#
25	5	1
24		
23		
22	Copper	
21	mg/l	
20		
19		
18		
17		
16		
15		
14	8	1
13		
12		
11	9	1
10		
9		
8	00016	5
7	13	2
6	002678	6
5	223358	6
4	0023456	7
3	001222445568	12
2	0011233344445669	16
1	02333447778	11
0	788	3

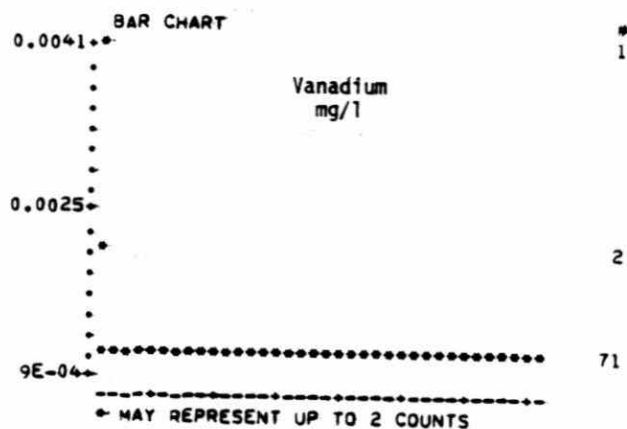
MULTIPLY STEM.LEAF BY 10<sup>00</sup>-03

```

STEM LEAF      #
  9 9           1
  9 3           1
 8 55    Ammonium 2
 8           mg N/l
 7 8           1
 7 12234       5
 6 99          2
 6 004        3
 5 568        3
 5 011233     6
 4 5778       4
 4 0001133    7
 3 555778888  9
 3 0111122334 10
 2 555        3
 2 00111223333344 14
 1 566667789  9
 1 0012244    7
 0 677        3
 0 01         2
-----
MULTIPLY STEM.LEAF BY 10**-01

```

MULTIPLY STEM.LEAF BY 10\*\*-01



BAR/STEM. LEAF CHARTS OF OBSERVED CONCENTRATION

NORTHWESTERN REGION

STEM	LEAF	#
4	03	2
3	7	1
3	34	2
2	599	3
2	012	3
1	555677889	9
1	0011111123334	13
0	556788899	9
0	3	1

Sulphate  
mg/l

STEM	LEAF	#
62	5	1
60		
58	39	2
56		
54	7	1
52	9	1
50	0968	4
48	695	3
46	3403	4
44	34724445669	11
42	01567	5

Lab pH

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
8	0	1
7	68	2
6		
5		
4	0479	4
3	14566	5
2	012336	6
1	0012446788	10
0	5666777	7

Calcium  
mg/l

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
8	9	1
8	04	2
7	688	3
7		
6	788	3
6	00134	5
5	678	3
5	44	2
4		
4	0124	4
3	557899	6
3	03334	5
2	56667	5

Total Hydrogen  
mg/l

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
8	1	1
7		
7		
6		
6		
5		
5	4	1
4		
4		
3		
3		
2	678	3
2	2223	4
1	567	3
1	000001222	9
0	5666677888899999	16
0	00012224	8

Chloride  
mg/l

MULTIPLY STEM.LEAF BY 10\*\*-01

BAR/STEM. LEAF CHARTS OF OBSERVED CONCENTRATION

NORTHWESTERN REGION

STEM	LEAF	#
16	5	1
15		
14		
13		
12		
11	5	1
10	2	1
9	1	1
8	08	2
7	05	2
6	08	2
5	04557	5
4	00123579	8
3	22346779	8
2	0122234779	10
1	2488999	7
0	6669	4

-----  
 MULTIPLY STEM.LEAF BY 10\*\*+01

STEM	LEAF	#
22	0	1
20		
18		
16		
14		
12	0	1
10	0	1
8	000	3
6	00000	5
4	00000000	8
2	000000000000000000	18
0	00	2

-----  
 MULTIPLY STEM.LEAF BY 10\*\*+02

STEM	LEAF	#
13	5	1
12	0	1
11		
10	01	2
9	0	1
8	025	3
7	0222	4
6	3	1
5	05	2
4	234	3
3	355888	6
2	011223558889	12
1	688	3
0	8	1

-----  
 MULTIPLY STEM.LEAF BY 10\*\*+01

STEM	LEAF	#
4	4	1
3		
3		
2		
2		
1	5577	4
1	1	1
0	556677	6
0	000011111111222333334444	24

-----  
 MULTIPLY STEM.LEAF BY 10\*\*+01

STEM	LEAF	#
20	0	1
18	0	1
16	0	1
14	00	2
12		
10	00	2
8	0	1
6	0000	4
4	00000	5
2	0000000000000000	15
0	558000000	9

-----  
 MULTIPLY STEM.LEAF BY 10\*\*+02

STEM	LEAF	#
7	4	1
6		
6		
5	777	3
5	0233	4
4	56789	5
4	12	2
3	56	2
3	0	1
2	66788	5
2	00112334	8
1	67888899	8
1	01124	5
0	7	1

-----  
 MULTIPLY STEM.LEAF BY 10\*\*+01

## NORTHWESTERN REGION

STEM LEAF	Conductance mmho/cm	#
30 25		2
28		
26 8		1
24 24		2
22 0		1
20 65		2
18 238825		6
16 002		3
14 379		3
12 2602558		7
10 0847		4

BAR/STEM. LEAF CHARTS OF OBSERVED CONCENTRATION

SOUTHEASTERN REGION

STEM	LEAF		#
9	6788	Calcium mg/l	4
8	17		2
7	2		1
6	112258		6
5			
4	16		2
3	0015788		7
2	03679		5
1	02334456889		11
0	45789		5

MULTIPLY STEM.LEAF BY 10\*\*--01

STEM	LEAF		#
7	4	Chloride mg/l	1
6	56		2
6			
5			
5	22		2
4			
4	034		3
3	569		3
3	014		3
2	9		1
2	0122233		7
1	55556678		8
1	1334444		7
0	566788889		9
0	4		1

MULTIPLY STEM.LEAF BY 10\*\*--01

STEM	LEAF		#
13	09	Nitrate mg N/l	2
12			
11	4		1
10	04		2
9	6		1
8	2		1
7	228		3
6	00179		5
5	0000123477		10
4	011226899		9
3	3466889999		10
2	39		2
1	6		1

MULTIPLY STEM.LEAF BY 10\*\*--01

STEM	LEAF		#
6	0	Sulphate mg/l	1
5	67		2
5	001111133		9
4	577		3
4	12233		5
3	9		1
3	011244		6
2	6666		4
2	11123333		8
1	56677		5
1	4		1
0	9		1
0	2		1

STEM	LEAF		#
15	9	Total Hydrogen mg/l	1
14	0		1
13	026		3
12	22579		5
11	38		2
10	268		3
9	23444456789		11
8	149		3
7	089		3
6	1236		4
5	034		3
4	26		2
3	23		2
2			
1			
0	0		1

MULTIPLY STEM.LEAF BY 10\*\*--02

STEM	LEAF		#
50	59	Lab pH	2
49	0		1
48			
47	5		1
46	78		2
45			
44	29		2
43	01357		5
42	2224467788		10
41	02245669		8
40	2334467		7
39	89		2
38	9		1

MULTIPLY STEM.LEAF BY 10\*\*--01

STEM	LEAF		#
5	7	Conductance mmho/cm	1
5	0124		4
4	579		3
4	111233		6
3	5678		4
3	0011244		7
2	566678889		9
2	0233		4
1	588		3
1	14		2

MULTIPLY STEM.LEAF BY 10\*\*--01

STEM	LEAF		#
18	9	Gauge Depth mm	1
17	2		1
16			
15			
14	09		2
13			
12	03577		5
11	01		2
10	18		2
9	00225899		8
8	478		3
7	00277		5
6	001227		6
5	2568		4
4	4		1
3	045		3
2	116		3
1	28		2

MULTIPLY STEM.LEAF BY 10\*\*--01

BAR/STEM. LEAF CHARTS OF OBSERVED CONCENTRATION

SOUTHEASTERN REGION

STEM	LEAF	#
13	0	1
12		
11		
10		
9	0	1
8	0	1
7		
6		
5	00	2
4	0	1
3	0000	4
2	0000	4
1	000000000000	12
0	5555555555	10

-----  
MULTIPLY STEM.LEAF BY 10\*\*-04

STEM	LEAF	#
16	00	2
15		
14		
13		
12		
11	0	1
10		
9		
8	000	3
7		
6	000	3
5	0000	4
4	0000	4
3	0000000000	9
2	00000	5
1	0000	4
0	555	3

-----  
MULTIPLY STEM.LEAF BY 10\*\*-03

STEM	LEAF	#
16	2	1
15		
14		
13		
12		
11	2	1
10		
9	2	1
8	8	1
7		
6	8	1
5	048	3
4	8	1
3	11225	5
2	0224	4
1	000477889	9
0	033344445556779	15

-----  
MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
9	8	1
8		
7		
6		
5	569	3
4	022	3
3	5569	4
2	22333	5
1	5678	4
0	03	2
5	6799	5
4	0022	4
3	5679	5
2	2344	4
1	69	2

-----  
MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	4	1
4	7	1
3		
2	034	3
1	77	2
0	12	2
5	99	2
4	11333344	8
3	555556678999	12
2	12222233444	12

-----  
MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
4	2	1
3	5	1
2		
1	5	1
0		
5	77	2
4	00	2
3	5556677777899	14
2	0111222222333344444444	24

-----  
MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
26	0	1
24		
22		
20		
18		
16	0	1
14		
12	50	2
10	0005	4
8	0	1
6	0055	4
4	0555	4
2	000555504555	12
0	55500555	8

-----  
MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
14	1	1
13		
12	5	1
11	0	1
10	12568	5
9		
8	0	1
7	05	2
6	0147	4
5	02589	5
4	000488	6
3	255779	6
2	023347778	9
1	7	1

-----  
MULTIPLY STEM.LEAF BY 10\*\*-01



[illegible]

BAR/STEM. LEAF CHARTS OF OBSERVED CONCENTRATION

## SOUTHWESTERN REGION

STEM	LEAF	#	STEM	LEAF	#
19	011	3	15	12	2
18			14		
17	Total Hydrogen		14	0	1
16	mg/l	3	13		
15	255	3	13	4	1
14	356	4	12		
14	1237	4	12	23	2
13	0367	4	11	57	2
12	0238	4	11		
11	0001477	7	10	67	2
10	011124556889	12	10	0144	4
9	01123445668	11	9	59	2
8	14499	5	9	01	2
7	01245678899	11	8	55	2
6	06789	5	8	0012	4
5	234	3	7	57778	5
4	25589	5	7	122344	6
3	1459	4	6	5566667	7
2			6	00112233	8
1			5	55677889	8
0	0	1	5	012234	6
			4	55667899	8
			4	0011112234444	13
			3	5666	4
			3	3	1

-----  
MULTIPLY STEM.LEAF BY 10\*\*-02

-----  
MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF		#
10	5		1
10			
9	8	Sulphate	1
9	02	mg/l	2
8	588		3
8	01		2
7	67		2
7	11		2
6	77899		5
6	122234		6
5	6779		6
5	012233		4
4	5566779999		9
4	00011112244		11
3	5566778999		10
3	00012334		8
2	5555567788999		13
2	04444		5
1	99		2

BAR/STEM. LEAF CHARTS OF OBSERVED CONCENTRATION

SOUTHWESTERN REGION

STEM	LEAF	#
26	2	1
25		
24	Total Kjeldahl	
23	mg N/l	
22		
21		
20	4	1
19		
18	2	1
17	6	1
16		
15	0	1
14	02	2
13	9	1
12	002	3
11	028	3
10	0228	4
9	34	2
8	0012223555668	13
7	02345555589	11
6	00124566788888	14
5	2	1
4	0002223568	10
3	001227788889	12
2		

-----  
MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
50	3	1
49		
49		
48	8	1
48	1	1
47		
47		
46		
46	3	1
45	66	2
45		
44	578	3
44	0023	4
43	558899	6
43	1112244	7
42	667889	6
42	000123	6
41	55566667999	11
41	001114	6
40	88	2
40	0034	4
39	5788899	7
39	33	2
38	557899	6
38		
37	9	1

-----  
MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
12	7	1
12		
11		
11		
10		
10	4	1
9		
9		
8	7	1
8		
7	79	2
7	1	1
6	67	2
6		
5		
5	122	3
4	5	1
4	00	2
3	5579	4
3	111222	6
2	5666778999999	13
2	012223344	9
1	5566677788889	13
1	0012333344444	14
0	6778888899	10
0	224	3

-----  
MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
11	0	1
10		
10		
9	8	1
9	2	1
8	6	1
8	012224	6
7	99	2
7	0	1
6	689	3
6	1233	4
5	5678	4
5	014	3
4	8999	4
4	03	2
3	555689	6
3	00000123444	11
2	556689	6
2	01122244	8
1	6889	4
1	2	1
0	8	1

-----  
MULTIPLY STEM.LEAF BY 10\*\*-01

## BAR/STEM. LEAF CHARTS OF OBSERVED CONCENTRATION

## SOUTHWESTERN REGION

STEM	LEAF	#
23	0	1
22	0	1
21		
20		
19		
18	0	1
17	0	1
16	00	2
15	0	1
14	0	1
13	0	1
12	00000	5
11	00000000	8
10	000000000	9
9	00000000000	11
8	00000000000	11
7	00000	5
6	0000	4
5	000	3
4	00000000	8
3	00	2
2	00	2
1		
0	5	1

MULTIPLY STEM.LEAF BY 10\*\*-03

STEM	LEAF	#
25	0	1
24		
23		
22		
21		
20		
19	2	1
18	2	1
17		
16		
15		
14	189	3
13	3	1
12	5	1
11	69	2
10	0178	4
9	256789	6
8	46	2
7	2689	4
6	222356	6
5	2456679	7
4	0133556677	10
3	0112366677788	13
2	111234559	9
1	568	3
0	8	1

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
8	8	1
7		
7		
6	6	1
6		
5		
5		
4		
4	24	2
3	588	3
3	2	1
2	9	1
2	0000123	7
1	55566688	8
1	000111122344	13
0	5555556666666667777778889999999	33
0	2333444444	10

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
19	0	1
18	0	1
17		
16	0	1
15		
14		
13	0	1
12	0	1
11		
10		
9	000	3
8	0000	4
7	0000000	7
6	000000000000000	14
5	00000000	8
4	000000	6
3	00000000000000000	18
2	00000000000000	13
1	0	1
0		

MULTIPLY STEM.LEAF BY 10\*\*-03

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
5	8	1
5		
4	6	1
4	2	1
3	6	1
3	014	3
2		
2	024	3
1	5666667	7
1	0000111122334	14
0	5555556666778888888999	23
0	0111222222222222222233444	27

MULTIPLY STEM.LEAF BY 10\*\*-01

BAR CHART

Nickel  
mg/l

0.0041

0.0023

5E-04

\* MAY REPRESENT UP TO 2 COUNTS

BAR/STEM. LEAF CHARTS OF OBSERVED CONCENTRATION

SOUTHWESTERN REGION

STEM	LEAF	#
20	58	2
19		
18	Ammonium	
17	mg N/l	
16		
15	6	1
14	9	1
13	2	1
12	5	1
11	017	3
10	019	3
9	1378	4
8	269	3
7	3359	4
6	00011223445666788	17
5	0223335566899	13
4	01255899	8
3	001112245566789	15
2	148899	6
1	37	2
0	8	1

-----

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
22	2	1
21		
20	Total Phosphorus	
19	mg/l	
18		
17		
16		
15		
14		
13		
12		
11		
10		
9	8	1
8		
7	0	1
6	0012	4
5	023	3
4	02588	5
3	02355888	8
2	022335669	9
1	00001112222333444455556678888888	32
0	0333345666788888999	19

-----

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
44	0	1
42		
40	Potassium	
38	mg/l	
36		
34		
32		
30		
28		
26	0	1
24		
22	0	1
20		
18		
16		
14	0000	4
12	000000	6
10	000000	6
8	0000	4
6	000000000000	12
4	000000000000000000000000000000	27
2	0000000000000000	15
0	000000	6

-----

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
36	00	2
34	0	1
32	05	2
30		
28	0	1
26		
24	0	1
22		
20	00	2
18	0	1
16	0005	4
14	0005500	7
12	0055500	7
10	005505	6
8	0000055	7
6	000005550055	12
4	0000000000555	13
2	005555	6
0	555	3

-----

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
16	5	1
15		
14	022	3
13	2	1
12	01119	5
11	345778	6
10	03	2
9	11238999	8
8	0022246688	10
7	111233556799	12
6	0033456678	10
5	002356899	9
4	00111235	8
3	0267789	7
2	012456779	9
1	35555799	8

-----

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
8	2	1
7		
7	24	2
6	55	2
6	022244	6
5	567	3
5	2444	4
4	55557889	8
4	00112334	8
3	56777789	8
3	11122222333344	14
2	5667789999999	13
2	01122334444444	13
1	557	3
1	3	1

-----

MULTIPLY STEM.LEAF BY 10\*\*-01

BAR/STEM. LEAF CHARTS OF OBSERVED CONCENTRATIONSOUTHWESTERN REGION

STEM	LEAF	#
16	2	1
15		
14	11	2
13	25	2
12	99	2
11	277	3
10	00225557	8
9	13	2
8	33	2
7	111288899	9
6	0233355589999	13
5	1224559	7
4	001122556688999	15
3	34578	5
2	388	3
1	35	2
0	9	1

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
20	0	1
19		
18		
17		
16		
15		
14		
13		
12	0	1
11		
10	0	1
9		
8		
7	0	1
6	000	3
5	00	2
4	0000000000	10
3	000000000	9
2	000000000000000000000000	22
1	0000000000000000	15
0	55555555555555	13

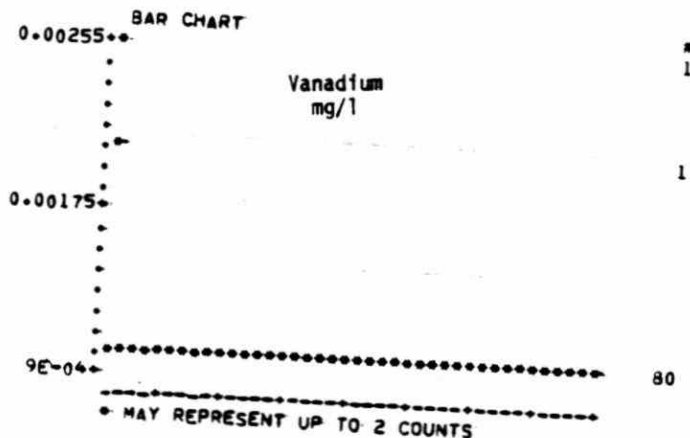
MULTIPLY STEM.LEAF BY 10\*\*-04

STEM	LEAF	#
13	6	1
13		
12		
12	0	1
11	5	1
11	01	2
10		
10	014	3
9	6	1
9	3	1
8	68	2
8	23	2
7	9	1
7	1	1
6	5689	4
6		
5	9	1
5	0234	4
4	5889	4
4	2	1
3	5889	4
3	00011334	8
2	55677999	8
2	0012244	7
1	5669	4
1	000000000133333444	18
0	89	2

MULTIPLY STEM.LEAF BY 10\*\*-03

STEM	LEAF	#
48	3	1
46		
44		
42		
40		
38		
36		
34		
32		
30		
28		
26		
24		
22	1	1
20		
18	7	1
16	5	1
14		
12	79	2
10	222	3
8	2578906	7
6	02671245	8
4	46670111166899999	17
2	012333455679913555679	21
0	45722235666899	14

MULTIPLY STEM.LEAF BY 10\*\*-02



**PART IV**

**BAR/STEM.LEAF CHARTS OF OBSERVED DEPOSITION BY REGION**

## BAR/STEM.LEAF CHARTS OF OBSERVED DEPOSITION

## CENTRAL REGION

STEM	LEAF	#
18	29	2
17	7	1
16		
15	8	1
14	07	2
13		
12	019	3
11	4	1
10	8	1
9	01334	5
8	1178	4
7	2458	4
6	012378	6
5	234468	6
4	1168	4
3	24	2
2	0345599	7
1	3579	4
0	59	2

Total Hydrogen  
mg/m\*\*2

STEM	LEAF	#
8	01	2
7		
7	2	1
6	5	1
6	34	2
5	9	1
5	24	2
4	9	1
4	1	1
3	55667778	9
3	0122334	7
2	666899	6
2	1	1
1	556666669	9
1	012223344	9
0	5678	4
0	1334	4

Sulphate  
mg/m\*\*2

MULTIPLY STEM.LEAF BY 10\*\*\*02

STEM	LEAF	#
9	4	1
8	6	1
8		
7	88	2
7	0	1
6	58	2
6	004	3
5	568	3
5	0222234	7
4	779	3
4	012223344	9
3	66779	5
3	1133	4
2	5668	4
2	012234	6
1	666788	6
1	013	3
0	5	1
0		

Nitrate  
mg N/m\*\*2

MULTIPLY STEM.LEAF BY 10\*\*\*01

STEM	LEAF	#
9	3	1
8		
8		
7		
7		
6		
6	12	2
5	8	1
5	022	3
4	67	2
4	1	1
3	77789	5
3	001224	6
2	99	2
2	0222	4
1	67789	5
1	0112224	7
0	6678999	7
0	23444	5

Calcium  
mg/m\*\*2

MULTIPLY STEM.LEAF BY 10\*\*\*01

STEM	LEAF	#
5	8	1
5	1	1
4		
4	0	1
3		
3	1	1
2	79	2
2	0002	4
1	5567788899	10
1	001111233333444	15
0	556667788999	12
0	2333444	7

Chloride  
mg/m\*\*2

MULTIPLY STEM.LEAF BY 10\*\*\*01

STEM	LEAF	#
13	9	1
12	5	1
11	0	1
10	6	1
9	7	1
8	1177	4
7	19	2
6	00136799	8
5	9	1
4	1389	4
3	0555568899	10
2	0226669	7
1	5566669	7
0	279	3

Total Kjeldahl  
mg N/m\*\*2

MULTIPLY STEM.LEAF BY 10\*\*\*01



BAR/STEM.LEAF CHARTS OF OBSERVED DEPOSITION

CENTRAL REGION

STEM LEAF	#	STEM LEAF	#
5 4	1	15 5	1
4		14	
4		13 5	1
3		12 7	1
3 1	1	11 4	1
2		10 77	2
2		9 13	2
1		8	
1 111	3	7 478	3
0 5555567789	11	6 126	3
0 000001111111111111112222333333334444	38	5 368999	6
-----		4 13358	5
MULTIPLY STEM.LEAF BY 10**+01		3 0056678	7
		2 12556689	8
		1 12345599	8
		0 23679	5
		-----	

STEM LEAF	#
10 6	1
10	
9	
9	
8	
8	
7	
7	
6	
6	
5	
5	
4	
4	
3	
3	
2	
2	
1 6	1
1	
0 568	3
0 000000000000000000001111111111111111222222222222333	45
-----	
MULTIPLY STEM.LEAF BY 10**+01	

STEM LEAF	#	STEM LEAF	#
15 6	1	13 7	1
14		12	
13		11 3	1
12 1	1	10	
11		9	
10 2	1	8 02	2
9		7 1	1
8 39	2	6 1	1
7 07	2	5 2	1
6 11355	5	4 7	1
5 156789	6	3 378	3
4 179	3	2 0112344679	10
3 77	2	1 00001122233457778	17
2 00134699	8	0 4556666778	10
1 222455	6	-----	
0 11122222445568	14	MULTIPLY STEM.LEAF BY 10**+01	
-----			

## BAR/STEM.LEAF CHARTS OF OBSERVED DEPOSITION

## CENTRAL REGION

STEM	LEAF	Ammonium mg N/m**2	#
11	1		1
10			
10			
9			
9	234		3
8			
8			
7	8		1
7	0		1
6	89		2
6	03		2
5	688		3
5	0334		4
4	68		2
4	01134		5
3	67		2
3	1134		4
2	566779		6
2	0112		4
1	555799		6
1	02334		5
0	677999		6
0	14		2

-----  
MULTIPLY STEM.LEAF BY 10\*\*01

STEM	LEAF	Sodium mg/m**2	#
38	4		1
36			
34			
32			
30			
28	6		1
26			
24	8		1
22			
20			
18	5		1
16			
14	1		1
12			
10	02		2
8	357133		6
6	6168		4
4	567882257		9
2	12234680012234689		17
0	05701245567779		14

-----

STEM	LEAF	Total Phosphorus mg/m**2	#
10	5		1
10			
9			
9			
8			
8	1		1
7			
7			
6			
6	3		1
5			
5			
4	8		1
4	3		1
3			
3	0		1
2	59		2
2	04		2
1	55679		5
1	012234		6
0	5556667788889		13
0	00011112233333444		18

-----

STEM	LEAF	Zinc mg/m**2	#
20	9		1
19			
18			
17			
16	7		1
15			
14			
13			
12	4		1
11	0145		4
10	0023		4
9	0189		4
8	159		3
7	3888		4
6	0135777		7
5	269		3
4	18		2
3	2244567779		10
2	038		3
1	1		1

-----  
MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	Iron mg/m**2	#
22	0		1
20			
18			
16			
14	62		2
12	9		1
10			
8	048		3
6	4550149		7
4	17845677		8
2	011580223457		12
0	7013445667999		13

-----

STEM	LEAF	Lead mg/m**2	#
24	6		1
22			
20			
18	0		1
16			
14	9		1
12	148		3
10	0340128		7
8	0345		4
6	235710689		9
4	00137914488		11
2	01813459		8
0	82678		5

-----  
MULTIPLY STEM.LEAF BY 10\*\*-01

BAR/STEM.LEAF CHARTS OF OBSERVED DEPOSITION

CENTRAL REGION

STEM	LEAF	#
23	2	1
22		
21		
20		
19	0	1
18		
17		
16		
15		
14		
13		
12	2	1
11	4	1
10		
9	27	2
8	257	3
7	2678	4
6	025	3
5	000246689	9
4	02238	5
3	023346899	9
2	125667778	9
1	347	3

-----

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
9	5	1
9		
8	578	3
8		
7		
7	4	1
6	7	1
5		
5	5	1
5	34	2
4	67	2
4	00233	5
3	5789	4
3	4	1
2	66678	5
2	00234	5
1	56678	5
1	023	3
0	55688889	8
0	4	1

-----

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
18	5	1
17		
16		
15	5	1
14		
13		
12	0247	4
11	23468	5
10	0018	4
9	57	2
8	124577	6
7	2266889	7
6	055779	6
5	122245558	9
4	5	1
3	5	1
2	4688	4

-----

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
19	9	1
18		
17		
16		
15	0	1
14		
13		
12		
11		
10		
9		
8		
7	2	1
6		
5	0012445689	10
4	16	2
3	45569	5
2	1224677	7
1	113344446	9
0	35667789999	11

-----

# BAR/STEM.LEAF CHARTS OF OBSERVED DEPOSITION

## NORTHEASTERN REGION

STEM	LEAF	#
40	7	1
38	5	1
36		
34		
32		
30		
28		
26		
24	1	1
22	26	2
20		
18	29	2
16	571	3
14	791	3
12	56633	5
10	8812	4
8	4624456	7
6	1236790145688	13
4	2223345688012444444456899	25
2	0267113446788	13
0	44890126789	11

Chloride  
mg/m\*\*2

STEM	LEAF	#
7	03	2
6	568	3
6	24	2
5	7	1
5	002	3
4	78	2
4	00114	5
3	5788	4
3	122223	6
2	566777999	9
2	0001112222334	13
1	556666667778899	15
1	000111112222333444	18
0	77888999	8
0	233	3

Nitrate  
mg N/m\*\*2

MULTIPLY STEM.LEAF BY 10\*\*\*01

STEM	LEAF	#
15	6	1
14		
13		
12		
11	0	1
10	5	1
9	13	2
8	18	2
7	11689	5
6	9	1
5	035679	6
4	02255799	8
3	00112225558899	14
2	01133345569	11
1	0000011112333344556788999	25
0	4578	4

Total Kjeldahl  
mg N/m\*\*2

MULTIPLY STEM.LEAF BY 10\*\*\*01

STEM	LEAF	#
20	1	1
19		
18		
17	1	1
16	4	1
15		
14	17	2
13	2	1
12	3	1
11	123	3
10	2788	4
9	36679	5
8	68	2
7	044	3
6	02347799	8
5	0235668	7
4	011333455677888899	18
3	0144467777888	13
2	23344445578	11
1	02589	5
0	78	2

Total Hydrogen  
mg/m\*\*2

MULTIPLY STEM.LEAF BY 10\*\*\*01

STEM	LEAF	#
7	8	1
7		
6	7	1
6	011	3
5	69	2
5	44	2
4		
4	1	1
3	6689	4
3	33444	5
2	678889	6
2	0111334	7
1	555566666899	13
1	0000001222223334	16
0	5555666667777888888889	24
0	233444444	9

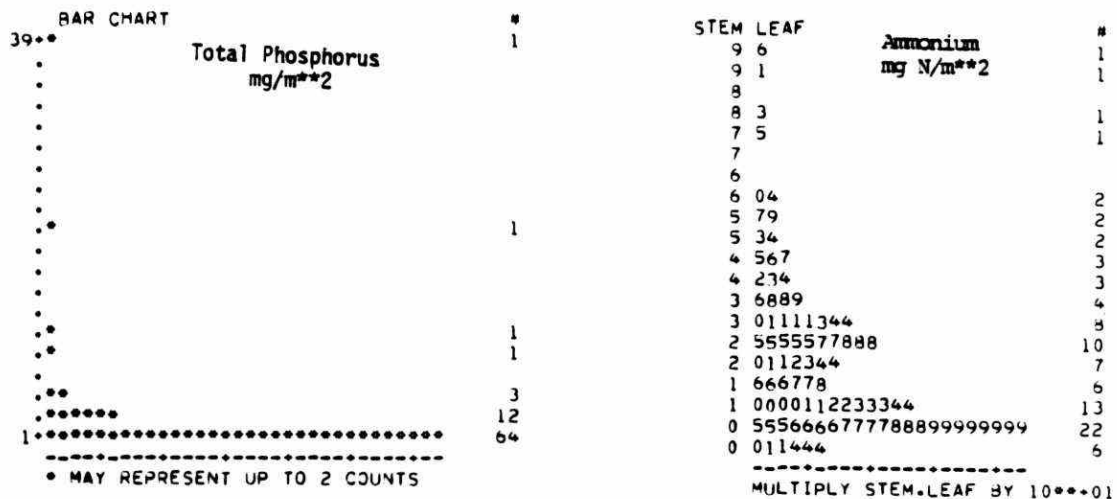
Sulphate  
mg/m\*\*2

MULTIPLY STEM.LEAF BY 10\*\*\*02

STEM	LEAF	#
15	7	1
14		
13		
12		
11	9	1
10	28	2
9	6	1
8	0255	4
7	35689	5
6	789	3
5	144	3
4	001237	6
3	0122356778	10
2	000112233444455555666778	24
1	001133334445567789	18
0	334557789	9

Free Hydrogen (Lab)  
mg/m\*\*2

STEM	LEAF	#	STEM	LEAF	#
11	0	1	20	3	1
10			19		
10	Calcium		18	Magnesium	
9	mg/m**2		17	mg/m**2	
9			16		
8			15		
8	3	1	14		
7			13	2	1
7	0	1	12		
6			11	8	1
6	01	2	10	34	2
5	5	1	9	4	1
5	2	1	8		
4			7	144589	6
4	3	1	6	28	2
3	58	2	5	26	2
3	12	2	4	4559	4
2	5589	4	3	0112477	7
2	001223	6	2	11223345668	11
1	55667789	8	1	00012345555667889	17
1	00001111122233444	17	0	111222223333445555556667789999	30
0	555666777778888899999	21			
0	11222333344444444444	20			
-----			-----		
MULTIPLY STEM.LEAF BY 10**01					



BAR/STEM.LEAF CHARTS OF OBSERVED DEPOSITION

NORTHEASTERN REGION

STEM	LEAF	#
9	0	1
8	8	1
7		
6		
5	7	1
4		
3	58	1
3	1224	2
2	8888	4
2	002234	4
1	55678999	6
1	0011112233344	8
0	5555555666677999	13
0	22333333344444444	16
		17

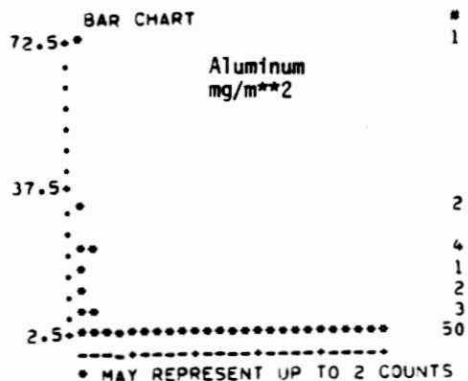
-----  
MULTIPLY STEM.LEAF BY 10\*\*-02

Cadmium  
mg/m\*\*2

STEM	LEAF	#
14	8	1
13		
12		
11	8	1
10	8	1
9		
8		
7	45	2
6	057	3
5	47	2
4	112249	6
3	02456999	8
2	000111222333344556699	20
1	0111222233455566899	19
0	66688999	8

-----  
MULTIPLY STEM.LEAF BY 10\*\*-01

Copper  
mg/m\*\*2



STEM	LEAF	#
44	4	1
42		
40		
38		
36		
34		
32		
30		
28		
26		
24		
22	8	1
20		
18	80	2
16		
14	06	2
12	35459	5
10	1340136	7
8	002359913334456	15
6	022233357801478	15
4	0233889901114445678	19
2	7812258	7

-----  
MULTIPLY STEM.LEAF BY 10\*\*-02

Vanadium  
mg/m\*\*2

STEM	LEAF	#
22	2	1
21		
20		
19	8	1
18		
17		
16		
15	5	1
14		
13	3	1
12		
11		
10	47	2
9	3	1
8		
7	56	2
6	2	1
5	16	2
4	0666	4
3	00011347889	11
2	2222577789	10
1	01223334557899999	17
0	3333445556666678899	19

-----  
MULTIPLY STEM.LEAF BY 10\*\*-01

Manganese  
mg/m\*\*2

STEM	LEAF	#
38	9	1
36		
34		
32		
30		
28		
26	08	2
24	25	2
22	6	1
20		
18	60	2
16	2	1
14	8	1
12	0	1
10	1801246	7
8	59456	5
6	12277058	8
4	001145667781124455	18
2	11444557901111124689	20
0	46679	5

-----  
MULTIPLY STEM.LEAF BY 10\*\*-02

Nickel  
mg/m\*\*2

## BAR/STEM.LEAF CHARTS OF OBSERVED DEPOSITION

## NORTHWESTERN REGION

STEM	LEAF	#
4	5	1
Free Hydrogen (Lab)		
mg/m**2		
3		
3		
2	6	1
2	1	1
1	67789	5
1	000234	6
0	55555557	9
0	001113444	9

STEM	LEAF	#
9	2	1
Total Hydrogen		
mg/m**2		
8		
7		
6	1	1
5		
4	34	2
3	123568	6
2	02334799	8
1	001111123366888	15
0	557788	6

STEM	LEAF	#
22	9	1
Sulphate		
mg/m**2		
20		
18		
16		
14	403	3
12	35	2
10	0	1
8	012679	6
6	04138	5
4	01356699122349	14
2	06379	5
0	001468	6

MULTIPLY STEM.LEAF BY 10\*\*+01

STEM	LEAF	#
30	35	2
Nitrate		
mg N/m**2		
28		
26		
24		
22	8	1
20	249	3
18	7	1
16	5882	4
14	48	2
12	92	2
10	045892355	9
8	5891248	7
6	17908	5
4	15129	5
2	3409	4

STEM	LEAF	#
10	6	1
Iron		
mg/m**2		
9		
8		
7	33	2
6		
5	06	2
4	7888	4
3	0188	4
2		
1	122466677	9
0	566678	6

STEM	LEAF	#
34	5	1
Ammonium		
mg N/m**2		
32		
30	2	1
28	07	2
26	4	1
24	09	2
22		
20	70	2
18	9	1
16	55	2
14	179	3
12	70	2
10	226405	6
8	161	3
6	1682389	7
4	023026	6
2	614	3
0	5	1

STEM	LEAF	#
3	0	1
Manganese		
mg/m**2		
2		
2		
1		
1	23	2
0	55	2
0	0000111111111111222222344	28



BAT/STEM.LEAF CHARTS OF OBSERVED DEPOSITION

NORTHWESTERN REGION

STEM	LEAF	#
7	5	1
6	3	1
5		
4	0	1
3	13	2
2	001244667779	12
1	01667899	8
0	23447788	8

-----

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
20	345	3
18		
16	5	1
14		
12	5	1
10	2	1
8	021	3
6	58	2
4	00164	5
2	4777899022457	13
0	089	3

-----

MULTIPLY STEM.LEAF BY 10\*\*-03

STEM	LEAF	#
16	8	1
15		
14		
13		
12		
11		
10	0	1
9	6	1
8	2	1
7	07	2
6		
5	2	1
4	9	1
3	036	3
2	00	2
1	00145777	8
0	11233444445555677889	20

-----

STEM	LEAF	#
11	5	1
10		
9		
8		
7	19	2
6	4	1
5		
4	16	2
3	0	1
2	0224589	7
1	11122223335578	14
0	25567777778	11

-----

STEM	LEAF	#
16	05	2
14		
12		
10	2	1
8	081	3
6	0805	4
4	00123545577	11
2	023477246779	12
0		

-----

MULTIPLY STEM.LEAF BY 10\*\*-02

## BAR/STEM.LEAF CHARTS OF OBSERVED DEPOSITION

## NORTHWESTERN REGION

STEM	LEAF	#
6	1	1
5		
5	Calcium	
	mg/m**2	
4		
4	1	1
3	6	1
3		
2	78	2
2	03	2
1	59	2
1	11234	5
0	5566677778	10
0	12222333444	11
-----		
MULTIPLY STEM.LEAF BY 10**+01		

STEM	LEAF	#
13	2	1
12	7	1
11		
10	0	1
9	0166	4
8	22	2
7	1	1
6	1334	4
5	58	2
4	00029	5
3	0123469	7
2	0122447	7
1	0048	4
0	122558	6
-----		

STEM	LEAF	#
8	2	1
7		
7	Total Phosphorus	
	mg/m**2	
6		
6		
5		
5		
4		
4	14	2
3		
3	013	3
2	89	2
2	02	2
1	56689	5
1	012334	6
0	555669	6
0	00112222333344	14
-----		

STEM	LEAF	#
6	6	1
6		
5	8	1
5		
4	55	2
4	1	1
3	58	2
3	044	3
2	9	1
2	003	3
1	477999	6
1	001122444	9
0	5566788889	10
0	4	1
-----		
MULTIPLY STEM.LEAF BY 10**+01		

STEM	LEAF	#
14	3	1
13		
12	0	1
11		
10		
9	6	1
8		
7		
6		
5	27	2
4	9	1
3	00	2
2	2447	4
1	04555599	8
0	11222233345667789	16
-----		

STEM	LEAF	#
13	2	1
12		
11		
10		
9		
8	156	3
7	7	1
6	234	3
5	556	3
4	3345	4
3	2235	4
2	1256	4
1	111134466	9
0	5	1
-----		
MULTIPLY STEM.LEAF BY 10**+01		

# BAR/STEM.LEAF CHARTS OF OBSERVED DEPOSITION

## NORTHWESTERN REGION

STEM	LEAF	Nickel mg/m**2	#
7	3		1
6			
5			
4			
3			
2			
1			
0	111111122222222222223333333444568		32
-----			
MULTIPLY STEM.LEAF BY 10**-01			

STEM	LEAF	Aluminum mg/m**2	#
9	0		1
8			
7			
6	8		1
5	058		3
4	5		1
3	5		1
2	0		1
1	0012334778		10
0	23335667788		11
-----			

STEM	LEAF	Copper mg/m**2	#
14	5		1
12			
10	8		1
8			
6	56		2
4	6		1
2	01258224		8
0	35566667777802256678		20
-----			
MULTIPLY STEM.LEAF BY 10**-01			

BAR/STEM.LEAF CHARTS OF OBSERVED DEPOSITION

SOUTHEASTERN REGION

STEM	LEAF	#
15	0	1
14		
13		
12		
11	239	3
10		
9	37	2
8		
7	068	3
6	16	2
5	36	2
4	022247	6
3	1566789	7
2	003667	6
1	0234789	7
0	88	2

Free Hydrogen (Lab)  
mg/m\*\*2

STEM	LEAF	#
20	3	1
18		
16	0	1
14	045	3
12	08	2
10	07	2
8	8179	4
6	36688890125	11
4	353369	6
2	6777899023357	13
0	0	1

Total Hydrogen  
mg/m\*\*2

STEM	LEAF	#
7	1	1
6	7	1
6	04	2
5	69	2
5	002	3
4		
4	34	2
3	5569	4
3	002	3
2	67778999	8
2	011	3
1	567	3
1	0223344	7
0	56688	5
0	244	3

Sulphate  
mg/m\*\*2

MULTIPLY STEM.LEAF BY 10\*\*\*02

STEM	LEAF	#
8	9	1
8		
7		
7	1	1
6	8	1
6		
5	55889	5
5	11344	5
4	5788	4
4	1234	4
3	555667889	9
3	344	3
2	579	3
2	0012344	7
1	7	1
1	024	3
0		

Nitrate  
mg N/m\*\*2

MULTIPLY STEM.LEAF BY 10\*\*\*01

STEM	LEAF	#
9	1	1
8	6	1
8		
7	58	2
7		
6		
6	002	3
5	89	2
5		
4		
4	2	1
3	6	1
3	1444	4
2	5558	4
2	013	3
1	5888	4
1	001124	6
0	556677788	9
0	33	2

Calcium  
mg/m\*\*2

MULTIPLY STEM.LEAF BY 10\*\*\*01

STEM	LEAF	#
5	4	1
4	7	1
4		
3	6	1
3	2	1
2	8	1
2	00344	5
1	556688999	9
1	00111222333344444	17
0	5677999	7
0	2244	4

Chloride  
mg/m\*\*2

MULTIPLY STEM.LEAF BY 10\*\*\*01

BAR/STEM.LEAF CHARTS OF OBSERVED DEPOSITION

SOUTHEASTERN REGION

STEM	LEAF	#
22	7	1
20		
18		
16		
14	2	1
12	8	1
10	2	1
8	7	1
6	345698	6
4	00012236889	11
2	11667469	8
0	446704568899	12
-----		
MULTIPLY STEM.LEAF BY 10***01		

STEM	LEAF	#
20	8	1
18		
16		
14		
12	8	1
10		
8	09	2
6	4577	4
4	07916	5
2	45773555689	11
0	3344457780355	13
-----		

STEM	LEAF	#
7	6	1
6	57	2
5		
5		
4		
4		
3		
3		
2	9	1
2	04	2
1	57899	5
1	011223344	9
0	555666777999	12
0	1334	4
-----		
MULTIPLY STEM.LEAF BY 10**-02		

STEM	LEAF	#
34	5	1
32		
30	7	1
28		
26		
24		
22	5	1
20		
18		
16	7	1
14		
12	07	2
10	1	1
8	7	1
6	23466	5
4	034476	6
2	2378803456	10
0	3447991222345778	16
-----		

STEM	LEAF	#
9	6	1
9		
8		
7	8	1
7	012	3
6		
6		
5	57	2
5	1	1
4	5678	4
4	14	2
3	77799	5
3	133	3
2	556	3
2	123	3
1	5	1
1	00012222333	11
0	688	3
0	233	3
-----		
MULTIPLY STEM.LEAF BY 10***01		

STEM	LEAF	#
14	8	1
13		
12		
11		
10	8	1
9	0	1
8		
7	8	1
6	2	1
5	8	1
4	899	3
3	2577	4
2	233346	6
1	00112223455566688	17
0	4	1
-----		
MULTIPLY STEM.LEAF BY 10**-01		

## BAR/STEM.LEAF CHARTS OF OBSERVED DEPOSITION

## SOUTHEASTERN REGION

STEM	LEAF	#
3	7	1
3	0	1
2		
2	13	2
1	68	2
1	012344	6
0	5556777777789	14
0	0112223333334444	17

-----  
 MULTIPLY STEM.LEAF BY 10\*\*\*01

STEM	LEAF	#
20	2	1
18		
16	0	1
14		
12	7	1
10		
8	6	1
6	90	2
4	235	3
2	02245	5
0	011122233344446678811235577	27

-----

STEM	LEAF	#
20	0	1
18		
16	5	1
14	99	2
12		
10	712	3
8	2446780137	10
6	155344	6
4	12356889	8
2	478	3
0	18	2

-----  
 MULTIPLY STEM.LEAF BY 10\*\*--01

STEM	LEAF	#
10	0	1
9	9	1
8	3	1
7	6	1
6	3	1
5	01255	5
4	557	3
3	03668	5
2	0112445668	10
1	28	2
0	33346799	8

-----  
 MULTIPLY STEM.LEAF BY 10\*\*--01

STEM	LEAF	#
3	7	1
3		
2		
2		
1		
1	2	1
0	555556666777999	16
0	122233333333334444	20

-----  
 MULTIPLY STEM.LEAF BY 10\*\*--01

STEM	LEAF	#
13	38	2
12	2	1
11	0	1
10	024	3
9	3679	4
8	04	2
7	0	1
6	0146	4
5	0004	4
4	2256679	7
3	4466678	7
2	8	1

-----  
 MULTIPLY STEM.LEAF BY 10\*\*--01

STEM	LEAF	#
3	3	1
2		
2	2	1
1		
1	0	1
0	5667778	7
0	11111222222233334444	25

-----  
 MULTIPLY STEM.LEAF BY 10\*\*\*01

STEM	LEAF	#
18	9	1
16	2	1
14	049	3
12	03577	5
10	1801	4
8	702259	6
6	001227007	9
4	42568	5
2	6045	4

-----  
 MULTIPLY STEM.LEAF BY 10\*\*--02

STEM	LEAF	#
3	2	1
2		
2		
1	7	1
1	0	1
0	569	3
0	00011111111111222233334444	30

-----  
 MULTIPLY STEM.LEAF BY 10\*\*\*01

# BAR/STEM.LEAF CHARTS OF OBSERVED DEPOSITION

## SOUTHWESTERN REGION

STEM	LEAF		#
28	8	Magnesium mg/m**2	1
26	4		1
24	5		1
22			
20			
18	3		1
16	59		2
14			
12	4602		4
10	5819		4
8	278800139		9
6	001555813		9
4	112255670035567778		18
2	12346680222334469		17
0	79145789		8

STEM	LEAF		#
9	2	Sulphate mg/m**2	1
8			
8	4		1
7			
7	33		2
6	5		1
6	2		1
5	55678		5
5	0011134		7
4	67		2
4	0123		4
3	5666689		7
3	01123444		8
2	55668888899		11
2	001112222444		12
1	5557778999999		13
1	001123334		9
0	56788889		8
0			

-----

MULTIPLY STEM.LEAF BY 10\*\*02

STEM	LEAF		#
14	3	Free Hydrogen (Lab) mg/m**2	1
13	8		1
12			
11	1		1
10	2468		4
9	03468		5
8	468		3
7	33		2
6	2224667		7
5	00114568		8
4	012335799		9
3	01256679		8
2	02246677777999		14
1	000222357		9
0	66778		5

STEM	LEAF		#
18	4	Total Hydrogen mg/m**2	1
17			
16	8		1
15	3		1
14	237		3
13	245		3
12	1299		4
11	01		2
10	235788		6
9	0016		4
8	17999		5
7	12345889		8
6	144556		6
5	34566899		8
4	022556678		9
3	0113348		7
2	1223447889		10
1	5568		4
0	067		3

STEM	LEAF		#
10	4	Nitrate mg N/m**2	1
10			
9			
9			
8	79		2
8	8		1
7	99		2
7	111444		6
6	5577789		7
6	1122		4
5	579		3
5	112234		6
4	5699		4
4	0012222333		10
3	556788999		9
3	012333334		9
2	5667779		7
2	12222334		8
1	66678888		8
1	14		2
0	5		1

STEM	LEAF		#
32	0	Potassium mg/m**2	1
30			
28			
26			
24			
22			
20			
18	08		2
16			
14			
12			
10	9		1
8	12819		5
6	0003146		7
4	00055667788990256679		20
2	000012244456901333344578		24
0	35677889911222556678889		23

-----

MULTIPLY STEM.LEAF BY 10\*\*01

# BAR/STEM.LEAF CHARTS OF OBSERVED DEPOSITION

## SOUTHWESTERN REGION

STEM	LEAF	#
28	0	1
26	2	1
24		
22		
20		
18	1	1
16		
14	9	1
12	2569	4
10	618	3
9	08276	5
6	12469991111	11
4	014689022344889	15
2	01233344457788900356688	23
0	3448902222667888	16

Sodium  
mg/m\*\*2

STEM	LEAF	#
11	0	1
10	7	1
10	4	1
9	779	3
9	4	1
8	5	1
8	0	1
7	78899	5
7	02	2
6	8	1
6	0011224	7
5	556668	6
5	0011134	7
4	566778899	9
4	3444	4
3	9999	4
3	00112334	5
2	56667888	8
2	2333	4
1	9999	4
1	03	2
0	6	1

Total Kjeldahl  
mg N/m\*\*2

STEM	LEAF	#
52	8	1
50		
48		
46		
44		
42		
40	6	1
38		
36		
34	31	2
32	9	1
30		
28	8	1
26	7	1
24	1	1
22	816	3
20	22814789	8
18	459128	6
16	3445890268	10
14	3658	4
12	23900345589	11
10	06681257	8
8	137013579	9
6	014968	6
4	889127	6
2	34678	5
0	28	2

Chloride  
mg/m\*\*2

STEM	LEAF	#
7	667	3
7	3	1
6	579	3
6	14	2
5	8	1
5	13	2
4	6899	4
4	02234	5
3	56689	5
3	113344	6
2	566888899	9
2	134	3
1	567778889	9
1	0022233444	10
0	99999	5
0	33	2

Calcium  
mg/m\*\*2

STEM	LEAF	#
8	79	2
8	4	1
7	56	2
7	13334	5
6	9	1
6	0014	4
5	5578	4
5	013	3
4	5556799	7
4	00000011344	11
3	55666899	8
3	01113344	8
2	5799	4
2	111222233	9
1	6660799	7
1	001234	6
0	568	3
0		

Ammonium  
mg N/m\*\*2

STEM	LEAF	#
19	8	1
18		
17		
16		
15		
14	03	2
13		
12	0	1
11	46	2
10	1356	4
9	0137999	7
8	122556	6
7	0111125	7
6	4577799	7
5	12459	5
4	000245566677888	15
3	112344577	9
2	223455	6
1	3457	4
0	27	2

Lead  
mg/m\*\*2



BAR/STEM.LEAF CHARTS OF OBSERVED DEPOSITIONSOUTHWESTERN REGION

STEM	LEAF	#
20	5	1
19		
18		
17		
16		
15		
14	0	1
13	18	2
12	0	1
11	3	1
10	2	1
9	36	2
8	9	1
7	1479	4
6	03569	5
5	00114488	8
4	1123445579	10
3	4555699	7
2	111222445556667	15
1	00223345556778	14
0	39	2

Iron  
mg/m\*\*2

STEM	LEAF	#
16	5	1
15		
14	022	3
13	2	1
12	01119	5
11	4578	4
10	023	3
9	11238999	8
8	0022246688	10
7	1123556799	10
6	003345678	9
5	002356899	9
4	011235	6
3	0267789	7
2	279	3
1	559	3

Vanadium  
mg/m\*\*2

MULTIPLY STEM.LEAF BY 10\*\*-02

STEM	LEAF	#
14	8	1
13		
12		
11		
10	9	1
9	2	1
8	39	2
7	03	2
6	099	3
5	022567779	9
4	023668	6
3	00001123345568999	17
2	1113444444555566789	19
1	122334555589	12
0	367899	6

Manganese  
mg/m\*\*2

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
8	0	1
7	5	1
7		
6		
6	1	1
5		
5		
4		
4	0011	4
3	556789	6
3	003	3
2	6789	4
2	3	1
1	667888999	9
1	0000001111233334	16
0	555555566667778889999	22
0	022223333333444	15

Total Phosphorus  
mg/m\*\*2

STEM	LEAF	#
13	359	3
12		
11		
10		
9	57	2
8		
7	13589	5
6	37	2
5	5	1
4	0018	4
3	023466778899	12
2	0011122344468	13
1	00001111223334445566789	23
0	2445566666677899	16

Copper  
mg/m\*\*2

MULTIPLY STEM.LEAF BY 10\*\*-01

STEM	LEAF	#
18	1	1
17		
16		
15		
14		
13	0	1
12	4	1
11		
10	49	2
9	034	3
8		
7	449	3
6	4	1
5	1235	4
4	01222468	8
3	00145778888	11
2	01113445677888	14
1	00002335556666788899	20
0	2455669	7

Aluminum  
mg/m\*\*2

STEM	LEAF	
9	0	1
8	5	1
8		
7	9	1
7		
6		
6		
5	7	1
5		
4	78	2
4		
3	88	2
3	0033	4
2	66689	5
2	0023444	7
1	555666778899	12
1	00111223444	11
0	5556666667788889999	19
0	122233334444	12
-----		
MULTIPLY STEM.LEAF BY 1000-02		

**PART V**

**SUMMARY STATISTICS OF OBSERVED CONCENTRATION BY STATION**

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : ALVINSTON/CUMULATIVE PRECIP. #05

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	JMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	10.0	10.00	11.0000	11.00	11.000	8.000
MAXIMUM :	165.0	62.0	4.63	0.1652	7.15	1.400	0.840
MINIMUM :	26.5	22.4	3.93	0.0000	2.50	0.410	0.260
RANGE :	138.5	39.6	0.70	0.1652	4.65	0.990	0.580
ARITH. MEAN :	76.8	37.0	4.26	0.0907	4.35	0.706	0.492
ARITH. STD. DEV :	41.9	13.2	0.22	0.0428	1.69	0.301	0.185
GEOM. MEAN :	66.4	35.1	4.26	0.1184	4.08	0.658	0.463
GEOM. STD. DEV. :	0.6	0.3	0.05	0.3583	0.37	0.384	0.378
1ST QUARTILE :	40.0	25.4	4.05	0.0643	2.93	0.455	0.350
2ND QUARTILE :	74.5	31.9	4.24	0.0918	3.60	0.585	0.495
3RD QUARTILE :	104.1	42.6	4.39	0.1014	5.57	0.820	0.575
VOL. WGT. MEAN :	*****	34.4	*****	0.0858	3.96	0.626	0.468

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : ALVINSTON/CUMULATIVE PRECIP. #05

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	8.000	11.000	9.000	10.000	9.000	11.000	11.0000
MAXIMUM :	0.770	2.040	0.350	0.270	0.420	1.560	0.0480
MINIMUM :	0.020	0.320	0.035	0.020	0.020	0.078	0.0060
RANGE :	0.750	1.720	0.315	0.250	0.400	1.482	0.0420
ARITH. MEAN :	0.240	0.777	0.113	0.086	0.090	0.583	0.0187
ARITH. STD. DEV :	0.228	0.490	0.096	0.087	0.127	0.404	0.0120
GEOM. MEAN :	0.164	0.673	0.090	0.060	0.053	0.462	0.0162
GEOM. STD. DEV. :	1.027	0.543	0.675	0.839	0.988	0.775	0.5468
1ST QUARTILE :	0.135	0.385	0.055	0.035	0.020	0.310	0.0120
2ND QUARTILE :	0.165	0.675	0.075	0.045	0.045	0.470	0.0150
3RD QUARTILE :	0.265	0.820	0.113	0.075	0.070	0.660	0.0170
VOL. WGT. MEAN :	0.168	0.649	0.089	0.070	0.061	0.477	0.0200

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : ALVINSTON/CUMULATIVE PRECIP.

#05

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 3

	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINIUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	11.0000	11.0000	10.000	9.0000	11.0000	11.000	10.000
MAXIMUM :	0.0190	0.0040	0.088	0.2499	0.0170	0.002	0.221
MINIMUM :	0.0020	0.0005	0.004	0.0211	0.0030	0.001	0.007
RANGE :	0.0170	0.0035	0.084	0.2288	0.0140	0.001	0.214
ARITH. MEAN :	0.0069	0.0011	0.025	0.0954	0.0085	0.001	0.068
ARITH. STD. DEV. :	0.0060	0.0011	0.029	0.0770	0.0040	0.000	0.062
GEOM. MEAN :	0.0052	0.0008	0.014	0.0715	0.0076	0.001	0.046
GEOM. STD. DEV. :	0.7573	0.7764	1.060	0.8263	0.5020	0.209	1.015
1ST QUARTILE :	0.0025	0.0005	0.005	0.0397	0.0050	0.001	0.020
2ND QUARTILE :	0.0055	0.0005	0.012	0.0639	0.0075	0.001	0.048
3RD QUARTILE :	0.0060	0.0012	0.024	0.0940	0.0105	0.001	0.088
VOL. WGT. MEAN :	0.0058	0.0008	0.020	0.0812	0.0075	0.001	0.062

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : ALVINSTON/CUMULATIVE PRECIP. #05

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 4

	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	10.0000	9.00000	10.0000
MAXIMUM :	0.0120	0.00040	0.1175
MINIMUM :	0.0008	0.00005	0.0234
RANGE :	0.0112	0.00035	0.0940
ARITH. MEAN :	0.0048	0.00025	0.0616
ARITH. STD. DEV :	0.0038	0.00011	0.0316
GEOM. MEAN :	0.0034	0.00022	0.0548
GEOM. STD. DEV. :	0.9290	0.62634	0.5124
1ST QUARTILE :	0.0014	0.00020	0.0365
2ND QUARTILE :	0.0034	0.00020	0.0578
3RD QUARTILE :	0.0073	0.00030	0.0669
VOL. WGT. MEAN :	0.0041	0.00024	0.0586

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : ATTAWAPISKAT/CUMULATIVE PRECIP. #28

PERIOD OF REPORT : DEC 31,80 TO JAN 9,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	JMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	11.0	6.0	5.00	8.0000	8.00	8.000	6.000
MAXIMUM :	221.2	27.0	5.47	0.0866	2.75	0.450	0.930
MINIMUM :	20.0	12.3	3.99	0.0284	0.30	0.030	0.190
RANGE :	201.2	14.7	1.48	0.0582	2.45	0.420	0.740
ARITH. MEAN :	62.6	18.0	4.80	0.0407	1.47	0.219	0.498
ARITH. STD. DEV :	56.2	6.5	0.63	0.0196	0.71	0.146	0.294
GEOM. MEAN :	49.2	17.1	4.76	0.0379	1.27	0.170	0.427
GEOM. STD. DEV. :	0.7	0.4	0.13	0.3749	0.65	0.847	0.623
1ST QUARTILE :	25.5	12.3	4.20	0.0297	1.17	0.140	0.215
2ND QUARTILE :	45.0	15.9	4.56	0.0335	1.35	0.165	0.430
3RD QUARTILE :	69.4	21.5	5.06	0.0423	1.82	0.330	0.605
VOL. WGT. MEAN :	*****	18.1	*****	0.0381	1.35	0.199	0.471

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : ATTAWAPISKAT/CUMULATIVE PRECIP. #28

PERIOD OF REPORT : DEC 31,80 TO JAN 9,82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	5.000	7.000	5.000	7.000	6.000	8.000	7.0000
MAXIMUM :	0.420	0.670	0.145	0.080	0.250	0.850	0.0100
MINIMUM :	0.005	0.160	0.020	0.005	0.010	0.074	0.0030
RANGE :	0.415	0.510	0.125	0.075	0.240	0.776	0.0070
ARITH. MEAN :	0.169	0.419	0.082	0.041	0.080	0.358	0.0071
ARITH. STD. DEV. :	0.158	0.172	0.058	0.029	0.092	0.294	0.0027
GEOM. MEAN :	0.087	0.384	0.064	0.030	0.046	0.257	0.0066
GEOM. STD. DEV. :	1.695	0.475	0.845	0.975	1.170	0.900	0.4383
1ST QUARTILE :	0.053	0.245	0.030	0.012	0.015	0.131	0.0040
2ND QUARTILE :	0.105	0.345	0.052	0.025	0.040	0.276	0.0065
3RD QUARTILE :	0.160	0.540	0.102	0.065	0.080	0.565	0.0095
VOL. WGT. MEAN :	0.125	0.401	0.082	0.052	0.056	0.285	0.0068

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : ATTAWAPISKAT/CUMULATIVE PRECIP. #28

PERIOD OF REPORT : DEC 31,80 TO JAN 9,82

PAGE : 3

	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	4.0000	4.0000	3.000	3.0000	4.0000	4.000	3.000
MAXIMUM :	0.0040	0.0040	0.014	0.0735	0.0080	0.001	0.057
MINIMUM :	0.0005	0.0005	0.003	0.0210	0.0020	0.001	0.006
RANGE :	0.0035	0.0035	0.010	0.0525	0.0060	0.000	0.051
ARITH. MEAN :	0.0029	0.0014	0.008	0.0390	0.0042	0.001	0.027
ARITH. STD. DEV :	0.0017	0.0018	0.005	0.0299	0.0029	0.000	0.027
GEOM. MEAN :	0.0022	0.0008	0.007	0.0326	0.0036	0.001	0.018
GEOM. STD. DEV. :	1.0010	1.0397	0.695	0.7047	0.6918	0.000	1.120
1ST QUARTILE :	0.0017	0.0005	*****	*****	0.0020	0.001	*****
2ND QUARTILE :	0.0035	0.0005	*****	*****	0.0035	0.001	*****
3RD QUARTILE :	0.0040	0.0022	*****	*****	0.0065	0.001	*****
VOL. WGT. MEAN :	0.0028	0.0014	0.008	0.0386	0.0044	0.001	0.026

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : ATTAWAPISKAT/CUMULATIVE PRECIP. #28

PERIOD OF REPORT : DEC 31,80 TO JAN 9,82

PAGE : 4

		COPPER	CADMIUM	FREE H+ LAB MG/L
		MG/L	MG/L	
# OF SAMPLES	:	3.0000	4.00000	5.0000
MAXIMUM	:	0.0148	0.00050	0.1023
MINIMUM	:	0.0030	0.00005	0.0034
RANGE	:	0.0118	0.00045	0.0989
ARITH. MEAN	:	0.0086	0.00016	0.0336
ARITH. STD. DEV	:	0.0059	0.00022	0.0411
GEOM. MEAN	:	0.0071	0.00009	0.0160
GEOM. STD. DEV.	:	0.8049	1.15129	1.4615
1ST QUARTILE	:	*****	0.00005	0.0037
2ND QUARTILE	:	*****	0.00005	0.0116
3RD QUARTILE	:	*****	0.00027	0.0290
VOL. WGT. MEAN	:	0.0089	0.00016	0.0338

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : BEAR ISLAND/CUMULATIVE PRECIP. #24

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	10.0	11.00	10.0000	11.00	11.000	9.000
MAXIMUM :	139.0	33.0	5.08	0.1042	4.20	0.960	0.600
MINIMUM :	12.0	11.6	4.07	0.0494	1.30	0.170	0.060
RANGE :	127.0	21.3	1.01	0.0548	2.90	0.790	0.540
ARITH. MEAN :	66.3	23.9	4.45	0.0797	2.83	0.393	0.180
ARITH. STD. DEV :	39.9	7.5	0.37	0.0203	1.01	0.211	0.164
GEOM. MEAN :	54.1	22.7	4.43	0.0771	2.64	0.355	0.142
GEOM. STD. DEV. :	0.7	0.4	0.08	0.2757	0.40	0.447	0.662
1ST QUARTILE :	35.0	16.2	4.13	0.0573	1.65	0.280	0.090
2ND QUARTILE :	51.0	24.6	4.23	0.0840	2.88	0.290	0.120
3RD QUARTILE :	98.5	28.9	4.80	0.0966	3.57	0.435	0.165
VOL. WGT. MEAN :	*****	24.5	*****	0.0798	3.01	0.350	0.232

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : BEAR ISLAND/CUMULATIVE PRECIP.

#24

PERIOD OF REPORT : DEC 31.80 TO JAN 5.82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	11.000	10.000	10.000	9.000	10.000	11.000	10.0000
MAXIMUM :	0.650	1.680	0.085	0.230	0.190	0.690	0.2300
MINIMUM :	0.010	0.040	0.002	0.010	0.010	0.001	0.0030
RANGE :	0.640	1.640	0.082	0.220	0.180	0.689	0.2270
ARITH. MEAN :	0.163	0.561	0.042	0.071	0.064	0.361	0.0359
ARITH. STD. DEV :	0.187	0.474	0.031	0.068	0.063	0.226	0.0690
GEOM. MEAN :	0.091	0.386	0.028	0.049	0.040	0.203	0.0154
GEOM. STD. DEV. :	1.217	1.033	1.145	0.936	1.065	1.848	1.1676
1ST QUARTILE :	0.030	0.225	0.012	0.025	0.015	0.163	0.0080
2ND QUARTILE :	0.085	0.430	0.042	0.050	0.035	0.315	0.0115
3RD QUARTILE :	0.205	0.745	0.065	0.065	0.085	0.565	0.0170
VOL. WGT. MEAN :	0.109	0.565	0.044	0.062	0.050	0.369	0.0429

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : BEAR ISLAND/CUMULATIVE PRECIP. #24

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 3

	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	10.0000	10.0000	10.000	8.0000	10.0000	10.000	8.000
MAXIMUM :	0.0160	0.0020	0.066	0.4806	0.0100	0.001	0.509
MINIMUM :	0.0005	0.0005	0.003	0.0123	0.0005	0.001	0.005
RANGE :	0.0155	0.0015	0.063	0.4683	0.0095	0.000	0.505
ARITH. MEAN :	0.0052	0.0009	0.017	0.1066	0.0060	0.001	0.093
ARITH. STD. DEV :	0.0044	0.0007	0.018	0.1548	0.0037	0.000	0.170
GEOM. MEAN :	0.0038	0.0008	0.012	0.0565	0.0043	0.001	0.034
GEOM. STD. DEV. :	0.9382	0.6696	0.889	1.1381	1.0717	0.000	1.426
1ST QUARTILE :	0.0020	0.0005	0.005	0.0252	0.0015	0.001	0.012
2ND QUARTILE :	0.0045	0.0005	0.014	0.0573	0.0075	0.001	0.036
3RD QUARTILE :	0.0055	0.0012	0.016	0.0977	0.0090	0.001	0.065
VOL. WGT. MEAN :	0.0064	0.0011	0.015	0.1537	0.0056	0.001	0.150

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : BEAR ISLAND/CUMULATIVE PRECIP. #24

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	9.0000	10.00000	11.0000
MAXIMUM :	0.0067	0.00070	0.0851
MINIMUM :	0.0013	0.00005	0.0083
RANGE :	0.0054	0.00065	0.0768
ARITH. MEAN :	0.0036	0.00029	0.0465
ARITH. STD. DEV :	0.0018	0.00022	0.0287
GEOM. MEAN :	0.0032	0.00021	0.0357
GEOM. STD. DEV. :	0.5449	0.93657	0.8448
1ST QUARTILE :	0.0021	0.00008	0.0141
2ND QUARTILE :	0.0031	0.00025	0.0489
3RD QUARTILE :	0.0043	0.00035	0.0709
VOL. WGT. MEAN :	0.0034	0.00022	0.0444

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : CAMPBELLFORD/CUMULATIVE PRECIP.

#13

PERIOD OF REPORT : DEC 31.80 TO JAN 5.82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	JMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	9.0	11.00	10.0000	11.00	12.000	10.000
MAXIMUM :	155.0	72.5	5.24	0.1294	5.20	1.210	1.220
MINIMUM :	4.0	23.4	3.86	0.0334	0.50	0.260	0.070
RANGE :	151.0	49.1	1.38	0.0960	4.70	0.950	1.150
ARITH. MEAN :	69.8	37.8	4.34	0.0860	3.60	0.616	0.442
ARITH. STD. DEV :	40.4	15.2	0.36	0.0266	1.63	0.231	0.341
GEOM. MEAN :	53.6	35.6	4.32	0.0815	3.06	0.579	0.338
GEOM. STD. DEV. :	1.0	0.4	0.08	0.3743	0.71	0.369	0.806
1ST QUARTILE :	45.8	26.3	4.10	0.0687	1.88	0.535	0.200
2ND QUARTILE :	68.0	33.0	4.26	0.0885	4.00	0.595	0.335
3RD QUARTILE :	88.1	40.1	4.39	0.0962	4.90	0.655	0.505
VOL. WGT. MEAN :	*****	37.1	*****	0.0888	3.53	0.546	0.348

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : CAMPBELLFORD/CUMULATIVE PRECIP.

#13

PERIOD OF REPORT : DEC 31.80 TO JAN 5.82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHORUS
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	11.000	9.000	11.000	10.000	11.000	11.000	10.0000
MAXIMUM :	0.500	1.180	0.140	0.100	0.170	0.910	0.0920
MINIMUM :	0.090	0.250	0.002	0.010	0.020	0.160	0.0005
RANGE :	0.410	0.930	0.137	0.090	0.150	0.750	0.0915
ARITH. MEAN :	0.238	0.664	0.054	0.049	0.101	0.475	0.0232
ARITH. STD. DEV. :	0.140	0.334	0.047	0.031	0.059	0.278	0.0289
GEOM. MEAN :	0.207	0.581	0.031	0.039	0.081	0.399	0.0093
GEOM. STD. DEV. :	0.539	0.578	1.315	0.751	0.762	0.635	1.6788
1ST QUARTILE :	0.135	0.340	0.010	0.020	0.035	0.216	0.0025
2ND QUARTILE :	0.190	0.575	0.032	0.040	0.090	0.322	0.0110
3RD QUARTILE :	0.265	0.845	0.092	0.075	0.155	0.710	0.0300
VOL. WGT. MEAN :	0.207	0.623	0.048	0.055	0.092	0.478	0.0269

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CAMPBELLFORD/CUMULATIVE PRECIP. #13

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 3

	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINIUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	9.0000	9.0000	8.000	6.0000	9.0000	9.000	7.000
MAXIMUM :	0.0200	0.0010	0.024	0.2359	0.0130	0.002	0.243
MINIMUM :	0.0005	0.0005	0.005	0.0127	0.0030	0.001	0.006
RANGE :	0.0195	0.0005	0.019	0.2232	0.0100	0.001	0.237
ARITH. MEAN :	0.0053	0.0006	0.012	0.0813	0.0078	0.001	0.072
ARITH. STD. DEV :	0.0059	0.0002	0.007	0.0830	0.0034	0.000	0.080
GEOM. MEAN :	0.0032	0.0006	0.010	0.0521	0.0070	0.001	0.044
GEOM. STD. DEV. :	1.0890	0.3056	0.602	1.0620	0.5309	0.231	1.145
1ST QUARTILE :	0.0015	0.0005	0.007	0.0205	0.0045	0.001	0.015
2ND QUARTILE :	0.0035	0.0005	0.008	0.0569	0.0075	0.001	0.039
3RD QUARTILE :	0.0050	0.0005	0.019	0.0911	0.0095	0.001	0.077
VOL. WGT. MEAN :	0.0037	0.0006	0.010	0.0620	0.0078	0.001	0.058

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CAMPBELLFORD/CUMULATIVE PRECIP. #13

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 4

	COPPER	CADMIUM	FREE H+ LAB MG/L
	MG/L	MG/L	MG/L
# OF SAMPLES :	7.0000	9.00000	11.0000
MAXIMUM :	0.0122	0.00140	0.1380
MINIMUM :	0.0018	0.00005	0.0058
RANGE :	0.0104	0.00135	0.1323
ARITH. MEAN :	0.0059	0.00027	0.0576
ARITH. STD. DEV :	0.0036	0.00043	0.0345
GEOM. MEAN :	0.0050	0.00014	0.0462
GEOM. STD. DEV. :	0.6411	1.09224	0.8183
1ST QUARTILE :	0.0026	0.00005	0.0314
2ND QUARTILE :	0.0043	0.00010	0.0508
3RD QUARTILE :	0.0077	0.00020	0.0705
VOL. WGT. MEAN :	0.0054	0.00023	0.0539

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : COLCHESTER/CUMULATIVE/WET

#01

PERIOD OF REPORT : DEC 31.80 TO JAN 5.82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	11.0	11.00	11.0000	12.00	11.000	10.000
MAXIMUM :	129.0	82.0	4.38	0.1914	10.50	1.230	0.690
MINIMUM :	19.0	24.5	3.79	0.0844	2.50	0.420	0.220
RANGE :	110.0	57.5	0.59	0.1070	8.00	0.810	0.470
ARITH. MEAN :	74.9	47.7	4.10	0.1276	5.54	0.726	0.508
ARITH. STD. DEV :	41.0	18.5	0.19	0.0380	2.42	0.279	0.178
GEOM. MEAN :	61.3	44.6	4.09	0.1228	5.08	0.683	0.474
GEOM. STD. DEV. :	0.7	0.4	0.05	0.2854	0.43	0.361	0.414
1ST QUARTILE :	31.5	31.3	3.91	0.0922	4.15	0.500	0.315
2ND QUARTILE :	81.9	41.1	4.07	0.1134	4.97	0.615	0.585
3RD QUARTILE :	109.5	59.5	4.25	0.1493	6.85	0.865	0.645
VOL. WGT. MEAN :	*****	46.2	*****	0.1244	5.40	0.647	0.470

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : COLCHESTER/CUMULATIVE/WET

#01

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	12.000	10.000	9.000	10.000	10.000	11.000	11.0000
MAXIMUM :	1.270	1.200	0.200	0.130	0.580	2.080	0.0620
MINIMUM :	0.040	0.300	0.050	0.010	0.020	0.214	0.0030
RANGE :	1.230	0.900	0.150	0.120	0.560	1.866	0.0590
ARITH. MEAN :	0.383	0.674	0.123	0.075	0.138	0.653	0.0235
ARITH. STD. DEV. :	0.347	0.289	0.049	0.042	0.163	0.511	0.0176
GEOM. MEAN :	0.276	0.613	0.114	0.059	0.090	0.537	0.0166
GEOM. STD. DEV. :	0.878	0.478	0.448	0.844	0.936	0.620	1.0006
1ST QUARTILE :	0.175	0.345	0.080	0.035	0.045	0.307	0.0055
2ND QUARTILE :	0.300	0.710	0.118	0.075	0.095	0.570	0.0180
3RD QUARTILE :	0.380	0.825	0.147	0.110	0.145	0.615	0.0335
VOL. WGT. MEAN :	0.258	0.618	0.110	0.068	0.091	0.522	0.0216

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : COLCHESTER/CUMULATIVE/WET

#01

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 3

		MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	10.0000	9.0000	9.000	9.0000	8.0000	10.000	9.000
MAXIMUM	:	0.0080	0.0020	0.035	0.1250	0.0160	0.002	0.102
MINIMUM	:	0.0030	0.0005	0.006	0.0219	0.0060	0.001	0.016
RANGE	:	0.0050	0.0015	0.029	0.1031	0.0100	0.001	0.087
ARITH. MEAN	:	0.0052	0.0007	0.018	0.0736	0.0106	0.001	0.056
ARITH. STD. DEV	:	0.0019	0.0005	0.010	0.0390	0.0031	0.000	0.033
GEOM. MEAN	:	0.0049	0.0006	0.015	0.0621	0.0102	0.001	0.046
GEOM. STD. DEV.	:	0.3859	0.4621	0.627	0.6716	0.3048	0.290	0.700
1ST QUARTILE	:	0.0030	0.0005	0.007	0.0329	0.0085	0.001	0.023
2ND QUARTILE	:	0.0055	0.0005	0.017	0.0681	0.0105	0.001	0.046
3RD QUARTILE	:	0.0065	0.0005	0.020	0.0989	0.0125	0.001	0.079
VOL. WGT. MEAN	:	0.0049	0.0005	0.014	0.0751	0.0098	0.001	0.059

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : COLCHESTER/CUMULATIVE/WET #01

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 4

	COPPER	CADMIUM	FREE H+ LAB MG/L
	MG/L	MG/L	MG/L
# OF SAMPLES :	9.0000	10.0000	11.0000
MAXIMUM :	0.0110	0.00070	0.1622
MINIMUM :	0.0011	0.00005	0.0417
RANGE :	0.0099	0.00065	0.1205
ARITH. MEAN :	0.0048	0.00025	0.0875
ARITH. STD. DEV. :	0.0031	0.00020	0.0386
GEOM. MEAN :	0.0039	0.00018	0.0803
GEOM. STD. DEV. :	0.6940	0.96240	0.4346
1ST QUARTILE :	0.0026	0.00005	0.0519
2ND QUARTILE :	0.0032	0.00020	0.0750
3RD QUARTILE :	0.0060	0.00035	0.1059
VOL. WGT. MEAN :	0.0048	0.00020	0.0869

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : COLDWATER/CUMULATIVE PRECIP.

#12

PERIOD OF REPORT : AUG 31,81 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	CALCIUM MG/L
	MM	UMHO/CM					
# OF SAMPLES :	4.0	3.0	4.00	4.0000	4.00	4.000	4.000
MAXIMUM :	100.0	40.5	4.66	0.1198	3.85	0.440	0.260
MINIMUM :	52.0	18.8	4.03	0.0472	0.65	0.210	0.120
RANGE :	48.0	21.7	0.63	0.0726	3.20	0.230	0.140
ARITH. MEAN :	76.8	26.4	4.38	0.0763	2.01	0.310	0.180
ARITH. STD. DEV :	19.7	12.2	0.26	0.0308	1.34	0.096	0.059
GEOM. MEAN :	74.7	24.7	4.38	0.0721	1.67	0.299	0.173
GEOM. STD. DEV. :	0.3	0.4	0.06	0.3834	0.73	0.305	0.320
1ST QUARTILE :	64.0	*****	4.22	0.0580	1.15	0.245	0.140
2ND QUARTILE :	77.5	*****	4.42	0.0691	1.77	0.295	0.170
3RD QUARTILE :	89.5	*****	4.55	0.0946	2.88	0.375	0.220
VOL. WGT. MEAN :	*****	27.6	*****	0.0819	2.26	0.328	0.183

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : COLDWATER/CUMULATIVE PRECIP.

#12

PERIOD OF REPORT : AUG 31,81 TO JAN 5,82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	4.000	4.000	4.000	4.000	4.000	4.000	4.0000
MAXIMUM :	0.120	0.360	0.020	0.070	0.050	0.286	0.0190
MINIMUM :	0.050	0.200	0.005	0.010	0.020	0.132	0.0080
RANGE :	0.070	0.160	0.015	0.060	0.030	0.154	0.0110
ARITH. MEAN :	0.082	0.297	0.015	0.035	0.035	0.190	0.0120
ARITH. STD. DEV :	0.029	0.074	0.007	0.026	0.013	0.068	0.0048
GEOM. MEAN :	0.079	0.290	0.013	0.027	0.033	0.182	0.0114
GEOM. STD. DEV. :	0.358	0.272	0.659	0.844	0.396	0.335	0.3673
1ST QUARTILE :	0.065	0.240	0.010	0.015	0.025	0.143	0.0090
2ND QUARTILE :	0.080	0.315	0.017	0.030	0.035	0.172	0.0105
3RD QUARTILE :	0.100	0.355	0.020	0.055	0.045	0.238	0.0150
VOL. WGT. MEAN :	0.079	0.297	0.015	0.037	0.033	0.203	0.0128

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : COLDWATER/CUMULATIVE PRECIP.

#12

PERIOD OF REPORT : AUG 31.81 TO JAN 5.82

PAGE : 3

		MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	4.0000	4.0000	4.000	4.0000	4.0000	4.000	4.000
MAXIMUM	:	0.0020	0.0010	0.011	0.0894	0.0090	0.001	0.043
MINIMUM	:	0.0010	0.0005	0.004	0.0205	0.0010	0.001	0.004
RANGE	:	0.0010	0.0005	0.008	0.0690	0.0080	0.000	0.039
ARITH. MEAN	:	0.0015	0.0006	0.007	0.0398	0.0065	0.001	0.021
ARITH. STD. DEV	:	0.0006	0.0003	0.004	0.0331	0.0037	0.000	0.018
GEOM. MEAN	:	0.0014	0.0006	0.006	0.0325	0.0049	0.001	0.014
GEOM. STD. DEV.	:	0.4002	0.3466	0.629	0.6811	1.0608	0.000	1.081
1ST QUARTILE	:	0.0010	0.0005	0.004	0.0224	0.0045	0.001	0.006
2ND QUARTILE	:	0.0015	0.0005	0.007	0.0247	0.0080	0.001	0.018
3RD QUARTILE	:	0.0020	0.0007	0.011	0.0572	0.0085	0.001	0.035
VOL. WGT. MEAN	:	0.0016	0.0006	0.008	0.0346	0.0064	0.001	0.019

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : COLDWATER/CUMULATIVE PRECIP.

#12

PERIOD OF REPORT : AUG 31,81 TO JAN 5,82

PAGE : 4

		COPPER	CADMIUM	FREE H+ LAB MG/L
		MG/L	MG/L	
# OF SAMPLES	:	4.0000	4.00000	4.0000
MAXIMUM	:	0.0037	0.00040	0.0933
MINIMUM	:	0.0008	0.00005	0.0219
RANGE	:	0.0029	0.00035	0.0714
ARITH. MEAN	:	0.0020	0.00021	0.0478
ARITH. STD. DEV	:	0.0014	0.00014	0.0313
GEOM. MEAN	:	0.0016	0.00017	0.0414
GEOM. STD. DEV.	:	0.7933	0.87219	0.6008
1ST QUARTILE	:	0.0008	0.00012	0.0295
2ND QUARTILE	:	0.0018	0.00020	0.0380
3RD QUARTILE	:	0.0032	0.00030	0.0661
VOL. WGT. MEAN	:	0.0021	0.00022	0.0533

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DALHOUSIE MILLS/CUMULATIVE PRECIP. #16

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 1

		PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
		MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
					MG/L		MG/L	
# OF SAMPLES	:	12.0	11.0	9.00	12.0000	11.00	11.000	11.000
MAXIMUM	:	149.0	52.5	4.90	0.1304	5.70	1.140	0.810
MINIMUM	:	21.2	10.7	4.02	0.0000	0.90	0.230	0.120
RANGE	:	127.8	41.8	0.88	0.1304	4.80	0.910	0.690
ARITH. MEAN	:	82.3	32.2	4.29	0.0791	3.34	0.550	0.371
ARITH. STD. DEV	:	34.9	12.8	0.28	0.0376	1.62	0.286	0.223
GEOM. MEAN	:	74.4	29.6	4.28	0.1008	2.94	0.494	0.317
GEOM. STD. DEV.	:	0.5	0.5	0.06	0.3891	0.56	0.473	0.586
1ST QUARTILE	:	58.4	22.8	4.05	0.0577	1.95	0.360	0.190
2ND QUARTILE	:	78.5	26.9	4.20	0.0742	2.82	0.420	0.280
3RD QUARTILE	:	100.2	44.1	4.36	0.1089	4.92	0.610	0.500
VOL. WGT. MEAN	:	*****	31.3	*****	0.0728	3.31	0.479	0.341

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : DALHOUSIE MILLS/CUMULATIVE PRECIP. #16

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHORUS
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	11.000	10.000	11.000	9.000	8.000	10.000	10.0000
MAXIMUM :	0.650	1.060	0.125	0.100	0.470	0.740	0.0920
MINIMUM :	0.070	0.220	0.010	0.030	0.040	0.064	0.0040
RANGE :	0.580	0.840	0.115	0.070	0.430	0.676	0.0880
ARITH. MEAN :	0.244	0.548	0.046	0.059	0.144	0.321	0.0299
ARITH. STD. DEV :	0.165	0.313	0.034	0.027	0.145	0.189	0.0307
GEOM. MEAN :	0.202	0.474	0.037	0.054	0.102	0.270	0.0172
GEOM. STD. DEV. :	0.648	0.569	0.719	0.439	0.841	0.666	1.1794
1ST QUARTILE :	0.115	0.270	0.020	0.040	0.050	0.190	0.0040
2ND QUARTILE :	0.190	0.440	0.035	0.045	0.090	0.280	0.0185
3RD QUARTILE :	0.315	0.705	0.050	0.065	0.180	0.395	0.0380
VOL. WGT. MEAN :	0.198	0.591	0.042	0.058	0.104	0.294	0.0372

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DALHOUSIE MILLS/CUMULATIVE PRECIP. #16

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	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINIUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	11.0000	11.0000	9.000	9.0000	10.0000	11.000	9.000
MAXIMUM :	0.0160	0.0010	0.018	0.4276	0.0120	0.001	0.323
MINIMUM :	0.0005	0.0005	0.005	0.0227	0.0040	0.001	0.009
RANGE :	0.0155	0.0005	0.013	0.4049	0.0080	0.000	0.314
ARITH. MEAN :	0.0042	0.0006	0.011	0.0855	0.0078	0.001	0.060
ARITH. STD. DEV :	0.0042	0.0002	0.005	0.1308	0.0024	0.000	0.102
GEOM. MEAN :	0.0028	0.0006	0.010	0.0490	0.0074	0.001	0.026
GEOM. STD. DEV. :	0.9897	0.2804	0.434	0.9445	0.3304	0.000	1.213
1ST QUARTILE :	0.0017	0.0005	0.007	0.0239	0.0060	0.001	0.010
2ND QUARTILE :	0.0030	0.0005	0.009	0.0352	0.0075	0.001	0.014
3RD QUARTILE :	0.0045	0.0005	0.013	0.0481	0.0085	0.001	0.038
VOL. WGT. MEAN :	0.0038	0.0006	0.010	0.0660	0.0074	0.001	0.044

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DALHOUSIE MILLS/CUMULATIVE PRECIP. #16

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	9.0000	9.00000	9.0000
MAXIMUM :	0.0208	0.00130	0.0955
MINIMUM :	0.0014	0.00005	0.0126
RANGE :	0.0194	0.00125	0.0829
ARITH. MEAN :	0.0057	0.00034	0.0592
ARITH. STD. DEV :	0.0061	0.00043	0.0288
GEOM. MEAN :	0.0040	0.00020	0.0510
GEOM. STD. DEV. :	0.8500	1.04784	0.6463
1ST QUARTILE :	0.0020	0.00010	0.0375
2ND QUARTILE :	0.0030	0.00015	0.0511
3RD QUARTILE :	0.0056	0.00020	0.0771
VOL. WGT. MEAN :	0.0050	0.00028	0.0579

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DORION/CUMULATIVE PRECIP.

#31

PERIOD OF REPORT : DEC 28,80 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	JMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	11.0	12.00	11.0000	12.00	12.000	12.000
MAXIMUM :	165.0	31.5	5.57	0.0886	4.05	0.570	0.440
MINIMUM :	6.4	11.7	4.30	0.0378	0.80	0.110	0.060
RANGE :	158.6	19.8	1.27	0.0508	3.25	0.460	0.380
ARITH. MEAN :	53.5	18.8	4.58	0.0644	1.82	0.367	0.203
ARITH. STD. DEV :	42.6	6.0	0.35	0.0162	0.90	0.166	0.134
GEOM. MEAN :	40.3	18.0	4.56	0.0625	1.65	0.327	0.160
GEOM. STD. DEV. :	0.8	0.3	0.07	0.2666	0.46	0.533	0.756
1ST QUARTILE :	32.1	13.1	4.35	0.0492	1.38	0.220	0.070
2ND QUARTILE :	42.1	18.6	4.49	0.0615	1.65	0.360	0.190
3RD QUARTILE :	56.3	21.3	4.57	0.0770	1.97	0.530	0.330
VOL. WGT. MEAN :	*****	16.8	*****	0.0618	1.69	0.311	0.184

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
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APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DORION/CUMULATIVE PRECIP.

#31

PERIOD OF REPORT : DEC 28,80 TO JAN 5,82

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	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	12.000	11.000	12.000	12.000	12.000	12.000	11.0000
MAXIMUM :	0.170	1.200	0.065	0.190	0.090	0.800	0.0750
MINIMUM :	0.005	0.180	0.002	0.008	0.020	0.100	0.0030
RANGE :	0.165	1.020	0.063	0.182	0.070	0.700	0.0720
ARITH. MEAN :	0.072	0.528	0.029	0.035	0.047	0.369	0.0263
ARITH. STD. DEV. :	0.050	0.345	0.020	0.051	0.024	0.269	0.0275
GEOM. MEAN :	0.052	0.435	0.020	0.020	0.041	0.291	0.0151
GEOM. STD. DEV. :	1.021	0.659	1.014	0.961	0.544	0.714	1.1358
1ST QUARTILE :	0.035	0.210	0.010	0.010	0.025	0.190	0.0050
2ND QUARTILE :	0.070	0.395	0.027	0.015	0.050	0.221	0.0100
3RD QUARTILE :	0.090	0.715	0.045	0.040	0.060	0.615	0.0435
VOL. WGT. MEAN :	0.064	0.435	0.026	0.035	0.045	0.285	0.0240

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
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STATION NAME : DORION/CUMULATIVE PRECIP.

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PERIOD OF REPORT : DEC 28,80 TO JAN 5,82

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	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINIUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	10.0000	10.0000	9.000	9.0000	10.0000	10.000	9.000
MAXIMUM :	0.0060	0.0005	0.015	0.1316	0.0110	0.001	0.208
MINIMUM :	0.0005	0.0005	0.001	0.0104	0.0005	0.001	0.003
RANGE :	0.0055	0.0000	0.014	0.1212	0.0105	0.000	0.205
ARITH. MEAN :	0.0021	0.0005	0.010	0.0599	0.0051	0.001	0.051
ARITH. STD. DEV :	0.0020	0.0000	0.005	0.0505	0.0032	0.000	0.066
GEOM. MEAN :	0.0015	0.0005	0.008	0.0402	0.0040	0.001	0.027
GEOM. STD. DEV. :	0.9405	0.0000	0.866	0.9967	0.8961	0.000	1.222
1ST QUARTILE :	0.0005	0.0005	0.004	0.0167	0.0025	0.001	0.013
2ND QUARTILE :	0.0015	0.0005	0.011	0.0292	0.0050	0.001	0.021
3RD QUARTILE :	0.0025	0.0005	0.013	0.0874	0.0065	0.001	0.039
VOL. WGT. MEAN :	0.0019	0.0005	0.009	0.0555	0.0042	0.001	0.047

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DORION/CUMULATIVE PRECIP.

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PERIOD OF REPORT : DEC 28,80 TO JAN 5,82

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	COPPER	CADMIUM	FREE H+ LAB MG/L
	MG/L	MG/L	MG/L
# OF SAMPLES :	9.0000	10.00000	12.0000
MAXIMUM :	0.0214	0.00050	0.0501
MINIMUM :	0.0012	0.00005	0.0027
RANGE :	0.0202	0.00045	0.0474
ARITH. MEAN :	0.0052	0.00015	0.0321
ARITH. STD. DEV :	0.0063	0.00014	0.0143
GEOM. MEAN :	0.0034	0.00011	0.0266
GEOM. STD. DEV. :	0.9057	0.80757	0.8112
1ST QUARTILE :	0.0015	0.00005	0.0266
2ND QUARTILE :	0.0028	0.00010	0.0320
3RD QUARTILE :	0.0046	0.00020	0.0442
VOL. WGT. MEAN :	0.0052	0.00013	0.0307

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
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STATION NAME : DORSET/CUMULATIVE PRECIP.

#20

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	PRECIP. MM	CONDUCT. JMHO/CM	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	CALCIUM MG/L
# OF SAMPLES :	12.0	12.0	12.00	11.0000	11.00	11.000	12.000
MAXIMUM :	185.0	54.5	4.49	0.1518	5.35	0.930	0.730
MINIMUM :	24.0	17.5	3.95	0.0820	1.45	0.280	0.050
RANGE :	161.0	37.0	0.54	0.0698	3.90	0.650	0.680
ARITH. MEAN :	79.8	35.1	4.22	0.1033	3.46	0.535	0.250
ARITH. STD. DEV :	42.9	10.8	0.15	0.0253	1.48	0.177	0.183
GEOM. MEAN :	69.6	33.6	4.21	0.1008	3.14	0.509	0.199
GEOM. STD. DEV. :	0.6	0.3	0.04	0.2262	0.48	0.334	0.716
1ST QUARTILE :	55.0	27.6	4.13	0.0821	1.88	0.380	0.125
2ND QUARTILE :	79.5	33.4	4.22	0.0913	3.38	0.495	0.200
3RD QUARTILE :	91.0	41.8	4.32	0.1159	4.60	0.620	0.335
VOL. WGT. MEAN :	*****	35.6	*****	0.1037	3.64	0.513	0.249

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
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STATION NAME : DORSET/CUMULATIVE PRECIP.

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	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	10.000	11.000	12.000	12.000	12.000	10.000	12.0000
MAXIMUM :	0.400	0.840	0.120	0.410	0.100	0.660	0.0340
MINIMUM :	0.040	0.200	0.002	0.010	0.020	0.156	0.0020
RANGE :	0.360	0.640	0.118	0.400	0.080	0.504	0.0320
ARITH. MEAN :	0.166	0.515	0.039	0.057	0.055	0.378	0.0102
ARITH. STD. DEV. :	0.096	0.224	0.034	0.112	0.028	0.191	0.0086
GEOM. MEAN :	0.143	0.464	0.024	0.027	0.049	0.332	0.0078
GEOM. STD. DEV. :	0.603	0.498	1.149	1.057	0.532	0.557	0.7896
1ST QUARTILE :	0.110	0.260	0.012	0.010	0.030	0.172	0.0045
2ND QUARTILE :	0.150	0.475	0.032	0.030	0.045	0.349	0.0100
3RD QUARTILE :	0.170	0.710	0.055	0.040	0.080	0.525	0.0120
VOL. WGT. MEAN :	0.135	0.551	0.040	0.040	0.049	0.419	0.0132

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DORSET/CUMULATIVE PRECIP.

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PERIOD OF REPORT : DEC 31.80 TO JAN 5.82

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	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	11.0000	11.0000	10.000	10.0000	11.0000	11.000	10.000
MAXIMUM :	0.0100	0.0020	0.042	0.2588	0.0080	0.001	0.235
MINIMUM :	0.0005	0.0005	0.003	0.0169	0.0050	0.001	0.008
RANGE :	0.0095	0.0015	0.038	0.2419	0.0030	0.000	0.227
ARITH. MEAN :	0.0041	0.0008	0.010	0.0734	0.0065	0.001	0.054
ARITH. STD. DEV :	0.0031	0.0005	0.011	0.0744	0.0009	0.000	0.069
GEOM. MEAN :	0.0031	0.0007	0.008	0.0493	0.0065	0.001	0.031
GEOM. STD. DEV. :	0.8992	0.4766	0.720	0.9264	0.1427	0.000	1.084
1ST QUARTILE :	0.0015	0.0005	0.005	0.0186	0.0060	0.001	0.011
2ND QUARTILE :	0.0035	0.0005	0.007	0.0482	0.0060	0.001	0.030
3RD QUARTILE :	0.0050	0.0010	0.009	0.0920	0.0070	0.001	0.059
VOL. WGT. MEAN :	0.0041	0.0007	0.007	0.0714	0.0064	0.001	0.050

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DORSET/CUMULATIVE PRECIP.

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PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	COPPER	CADMIUM	FREE H+ LAB MG/L
	MG/L	MG/L	MG/L
# OF SAMPLES :	9.0000	11.00000	12.0000
MAXIMUM :	0.0037	0.00060	0.1122
MINIMUM :	0.0008	0.00005	0.0324
RANGE :	0.0029	0.00055	0.0798
ARITH. MEAN :	0.0023	0.00017	0.0645
ARITH. STD. DEV :	0.0012	0.00018	0.0238
GEOM. MEAN :	0.0019	0.00011	0.0608
GEOM. STD. DEV. :	0.6268	0.93175	0.3552
1ST QUARTILE :	0.0010	0.00005	0.0479
2ND QUARTILE :	0.0022	0.00008	0.0603
3RD QUARTILE :	0.0031	0.00020	0.0754
VOL. WGT. MEAN :	0.0018	0.00016	0.0659

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : EAR FALL'S/CUMULATIVE PRECIP.

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PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	4.0	7.00	6.0000	8.00	8.000	6.000
MAXIMUM :	115.0	21.5	5.83	0.0614	3.70	0.740	0.230
MINIMUM :	6.3	11.4	4.54	0.0334	0.70	0.100	0.070
RANGE :	108.7	10.1	1.29	0.0280	3.00	0.640	0.160
ARITH. MEAN :	43.9	16.5	5.00	0.0458	1.49	0.296	0.148
ARITH. STD. DEV :	33.9	5.3	0.47	0.0118	1.05	0.199	0.056
GEOM. MEAN :	32.4	15.9	4.98	0.0446	1.27	0.253	0.139
GEOM. STD. DEV. :	0.9	0.3	0.09	0.2483	0.57	0.585	0.416
1ST QUARTILE :	18.4	12.0	4.55	0.0361	0.92	0.200	0.090
2ND QUARTILE :	34.3	16.6	4.81	0.0407	1.05	0.225	0.150
3RD QUARTILE :	62.5	21.1	5.22	0.0508	1.80	0.340	0.170
VOL. WGT. MEAN :	*****	16.2	*****	0.0431	1.20	0.224	0.144

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
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STATION NAME : EAR FALL'S/CUMULATIVE PRECIP.

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	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	8.000	6.000	8.000	7.000	7.000	8.000	7.0000
MAXIMUM :	0.810	1.350	0.445	0.140	0.220	1.050	0.0900
MINIMUM :	0.005	0.220	0.010	0.020	0.010	0.144	0.0070
RANGE :	0.805	1.130	0.435	0.120	0.210	0.906	0.0830
ARITH. MEAN :	0.193	0.608	0.092	0.067	0.061	0.428	0.0406
ARITH. STD. DEV :	0.256	0.440	0.153	0.044	0.073	0.304	0.0270
GEOM. MEAN :	0.099	0.491	0.036	0.055	0.038	0.349	0.0320
GEOM. STD. DEV. :	1.419	0.717	1.366	0.697	1.027	0.677	0.8201
1ST QUARTILE :	0.085	0.235	0.012	0.025	0.015	0.204	0.0145
2ND QUARTILE :	0.110	0.465	0.027	0.050	0.025	0.321	0.0335
3RD QUARTILE :	0.170	0.725	0.102	0.090	0.065	0.590	0.0490
VOL. WGT. MEAN :	0.122	0.552	0.063	0.069	0.053	0.357	0.0502

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
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STATION NAME : EAR FALL'S/CUMULATIVE PRECIP.

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	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	5.0000	5.0000	5.000	3.0000	5.0000	5.000	3.000
MAXIMUM :	0.0950	0.0080	0.024	0.0745	0.0100	0.005	0.057
MINIMUM :	0.0020	0.0005	0.003	0.0167	0.0030	0.001	0.009
RANGE :	0.0930	0.0075	0.021	0.0578	0.0070	0.004	0.048
ARITH. MEAN :	0.0220	0.0023	0.011	0.0478	0.0068	0.002	0.038
ARITH. STD. DEV :	0.0409	0.0033	0.008	0.0292	0.0026	0.002	0.026
GEOM. MEAN :	0.0064	0.0011	0.008	0.0402	0.0063	0.001	0.029
GEOM. STD. DEV. :	1.5978	1.2399	0.808	0.7821	0.4567	0.720	1.044
1ST QUARTILE :	0.0020	0.0005	0.004	*****	0.0045	0.001	*****
2ND QUARTILE :	0.0030	0.0005	0.008	*****	0.0065	0.001	*****
3RD QUARTILE :	0.0055	0.0012	0.011	*****	0.0075	0.001	*****
VOL. WGT. MEAN :	0.0153	0.0033	0.009	0.0470	0.0064	0.001	0.041

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : EAR FALL'S/CUMULATIVE PRECIP. #35

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 4

	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	5.0000	5.00000	7.0000
MAXIMUM :	0.0237	0.00050	0.0288
MINIMUM :	0.0014	0.00005	0.0015
RANGE :	0.0223	0.00045	0.0274
ARITH. MEAN :	0.0089	0.00017	0.0148
ARITH. STD. DEV :	0.0094	0.00019	0.0115
GEOM. MEAN :	0.0054	0.00012	0.0100
GEOM. STD. DEV. :	1.1499	0.85188	1.0884
1ST QUARTILE :	0.0022	0.00008	0.0033
2ND QUARTILE :	0.0034	0.00010	0.0085
3RD QUARTILE :	0.0081	0.00010	0.0255
VOL. WGT. MEAN :	0.0066	0.00013	0.0106

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : EXP. LAKES AREA/CUMULATIVE PRECIP. #34

PERIOD OF REPORT : OCT 6.81 TO JAN 5.82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3 MG/L	MG/L	AS N MG/L	MG/L
# OF SAMPLES :	3.0	2.0	2.00	2.0000	2.00	2.000	2.000
MAXIMUM :	27.1	17.2	4.64	0.0676	2.25	0.490	0.260
MINIMUM :	19.0	16.0	4.43	0.0570	1.50	0.260	0.140
RANGE :	8.1	1.2	0.21	0.0106	0.75	0.230	0.120
ARITH. MEAN :	23.0	16.6	4.53	0.0623	1.88	0.375	0.200
ARITH. STD. DEV :	4.1	0.8	0.15	0.0075	0.53	0.163	0.085
GEOM. MEAN :	22.8	16.6	4.53	0.0621	1.84	0.357	0.191
GEOM. STD. DEV. :	0.2	0.1	0.03	0.1206	0.29	0.448	0.438
1ST QUARTILE :	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****	*****	*****	*****
VOL. WGT. MEAN :	*****	16.6	*****	0.0627	1.84	0.366	0.195

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : EXP. LAKES AREA/CUMULATIVE PRECIP. #34

PERIOD OF REPORT : OCT 6,81 TO JAN 5,82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	2.000	2.000	2.000	2.000	2.000	2.000	2.0000
MAXIMUM :	0.020	0.720	0.040	0.020	0.030	0.640	0.0200
MINIMUM :	0.020	0.290	0.010	0.020	0.020	0.244	0.0100
RANGE :	0.000	0.430	0.030	0.000	0.010	0.396	0.0100
ARITH. MEAN :	0.020	0.505	0.025	0.020	0.025	0.442	0.0150
ARITH. STD. DEV :	0.000	0.304	0.021	0.000	0.007	0.280	0.0071
GEOM. MEAN :	0.020	0.457	0.020	0.020	0.024	0.395	0.0141
GEOM. STD. DEV. :	0.000	0.643	0.980	0.000	0.287	0.682	0.4901
1ST QUARTILE :	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****	*****	*****	*****
VOL. WGT. MEAN :	0.020	0.487	0.024	0.020	0.025	0.426	0.0146

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : EXP. LAKES AREA/CUMULATIVE PRECIP. #34

PERIOD OF REPORT : OCT 6,81 TO JAN 5,82

PAGE : 3

		MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	2.0000	2.0000	2.000	2.0000	2.0000	2.000	2.000
MAXIMUM	:	0.0040	0.0005	0.015	0.0724	0.0070	0.001	0.032
MINIMUM	:	0.0020	0.0005	0.004	0.0229	0.0030	0.001	0.012
RANGE	:	0.0020	0.0000	0.011	0.0495	0.0040	0.000	0.020
ARITH. MEAN	:	0.0030	0.0005	0.010	0.0477	0.0050	0.001	0.022
ARITH. STD. DEV	:	0.0014	0.0000	0.008	0.0350	0.0028	0.000	0.014
GEOM. MEAN	:	0.0028	0.0005	0.008	0.0407	0.0046	0.001	0.019
GEOM. STD. DEV.	:	0.4901	0.0000	0.926	0.8131	0.5991	0.000	0.711
1ST QUARTILE	:	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE	:	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE	:	*****	*****	*****	*****	*****	*****	*****
VOL. WGT. MEAN	:	0.0029	0.0005	0.009	0.0456	0.0052	0.001	0.021

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : EXP. LAKES AREA/CUMULATIVE PRECIP. #34

PERIOD OF REPORT : OCT 6,81 TO JAN 5,82

PAGE : 4

		COPPER	CADMIUM	FREE H+
		MG/L	MG/L	LAB MG/L
# OF SAMPLES	:	2.0000	2.00000	2.0000
MAXIMUM	:	0.0092	0.00020	0.0372
MINIMUM	:	0.0028	0.00010	0.0229
RANGE	:	0.0064	0.00010	0.0142
ARITH. MEAN	:	0.0060	0.00015	0.0300
ARITH. STD. DEV	:	0.0045	0.00007	0.0101
GEOM. MEAN	:	0.0051	0.00014	0.0292
GEOM. STD. DEV.	:	0.8365	0.49013	0.3419
1ST QUARTILE	:	*****	*****	*****
2ND QUARTILE	:	*****	*****	*****
3RD QUARTILE	:	*****	*****	*****
VOL. WGT. MEAN	:	0.0063	0.00015	0.0306

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GOLDEN LAKE/CUMULATIVE PRECIP. #17

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	12.0	12.00	12.0000	12.00	12.000	12.000
MAXIMUM :	140.0	57.0	4.33	0.1316	6.00	0.960	0.970
MINIMUM :	20.6	22.3	4.03	0.0788	1.40	0.290	0.050
RANGE :	119.4	34.7	0.30	0.0528	4.60	0.670	0.920
ARITH. MEAN :	73.2	36.7	4.18	0.1065	3.40	0.524	0.273
ARITH. STD. DEV :	34.6	9.2	0.09	0.0159	1.53	0.200	0.280
GEOM. MEAN :	65.0	35.6	4.18	0.1054	3.06	0.494	0.182
GEOM. STD. DEV. :	0.5	0.3	0.02	0.1502	0.49	0.356	0.916
1ST QUARTILE :	52.0	30.3	4.11	0.0960	2.02	0.375	0.095
2ND QUARTILE :	66.9	36.6	4.19	0.1042	3.27	0.495	0.145
3RD QUARTILE :	94.1	41.8	4.24	0.1192	4.35	0.600	0.405
VOL. WGT. MEAN :	*****	36.1	*****	0.1060	3.53	0.484	0.260

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : GOLDEN LAKE/CUMULATIVE PRECIP. #17

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	12.000	11.000	12.000	12.000	11.000	12.000	12.0000
MAXIMUM :	0.660	1.080	0.160	0.420	0.210	0.790	0.1620
MINIMUM :	0.040	0.170	0.005	0.005	0.010	0.090	0.0005
RANGE :	0.620	0.910	0.155	0.415	0.200	0.700	0.1615
ARITH. MEAN :	0.192	0.495	0.047	0.087	0.073	0.344	0.0294
ARITH. STD. DEV :	0.178	0.319	0.049	0.142	0.060	0.242	0.0460
GEOM. MEAN :	0.138	0.414	0.030	0.035	0.051	0.273	0.0108
GEOM. STD. DEV. :	0.855	0.625	1.016	1.316	0.932	0.723	1.5721
1ST QUARTILE :	0.060	0.220	0.017	0.020	0.020	0.144	0.0050
2ND QUARTILE :	0.145	0.385	0.025	0.025	0.050	0.277	0.0070
3RD QUARTILE :	0.225	0.595	0.062	0.060	0.100	0.475	0.0410
VOL. WGT. MEAN :	0.184	0.491	0.049	0.095	0.075	0.360	0.0377

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : GOLDEN LAKE/CUMULATIVE PRECIP. #17

PERIOD OF REPORT : DEC 31.80 TO JAN 5.82

PAGE : 3

	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	10.0000	10.0000	9.000	9.0000	10.0000	10.000	9.000
MAXIMUM :	0.0160	0.0010	0.021	0.0899	0.0150	0.002	0.064
MINIMUM :	0.0005	0.0005	0.003	0.0115	0.0050	0.001	0.004
RANGE :	0.0155	0.0005	0.017	0.0785	0.0100	0.001	0.060
ARITH. MEAN :	0.0039	0.0005	0.010	0.0315	0.0084	0.001	0.020
ARITH. STD. DEV :	0.0046	0.0002	0.005	0.0270	0.0038	0.000	0.021
GEOM. MEAN :	0.0024	0.0005	0.008	0.0246	0.0078	0.001	0.013
GEOM. STD. DEV. :	1.0180	0.2192	0.530	0.6980	0.4047	0.219	0.968
1ST QUARTILE :	0.0010	0.0005	0.006	0.0143	0.0055	0.001	0.006
2ND QUARTILE :	0.0020	0.0005	0.007	0.0203	0.0070	0.001	0.009
3RD QUARTILE :	0.0045	0.0005	0.010	0.0245	0.0090	0.001	0.020
VOL. WGT. MEAN :	0.0035	0.0005	0.009	0.0289	0.0076	0.001	0.018

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : GOLDEN LAKE/CUMULATIVE PRECIP. #17

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 4

	COPPER	CADMIUM	FREE H+ LAB MG/L
	MG/L	MG/L	MG/L
# OF SAMPLES :	9.0000	10.00000	12.0000
MAXIMUM :	0.0086	0.00090	0.0933
MINIMUM :	0.0009	0.00005	0.0468
RANGE :	0.0077	0.00085	0.0466
ARITH. MEAN :	0.0036	0.00025	0.0680
ARITH. STD. DEV :	0.0025	0.00026	0.0149
GEOM. MEAN :	0.0028	0.00017	0.0666
GEOM. STD. DEV. :	0.7608	0.94378	0.2170
1ST QUARTILE :	0.0014	0.00008	0.0576
2ND QUARTILE :	0.0029	0.00015	0.0647
3RD QUARTILE :	0.0044	0.00030	0.0776
VOL. WGT. MEAN :	0.0034	0.00023	0.0680

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GOWGANDA/CUMULATIVE PRECIP.

#25

PERIOD OF REPORT : DEC 31.80 TO JAN 8.82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	10.0	12.00	10.0000	11.00	12.000	10.000
MAXIMUM :	156.0	54.5	4.89	0.1398	5.45	0.820	0.750
MINIMUM :	14.0	15.0	4.01	0.0458	1.25	0.140	0.040
RANGE :	142.0	39.5	0.88	0.0940	4.20	0.680	0.710
ARITH. MEAN :	59.5	27.9	4.34	0.0905	2.92	0.398	0.204
ARITH. STD. DEV :	39.4	13.9	0.29	0.0302	1.42	0.210	0.214
GEOM. MEAN :	49.0	25.3	4.34	0.0859	2.60	0.349	0.143
GEOM. STD. DEV. :	0.7	0.5	0.07	0.3478	0.52	0.548	0.843
1ST QUARTILE :	29.5	16.9	4.11	0.0640	1.32	0.235	0.080
2ND QUARTILE :	50.0	23.7	4.26	0.0877	2.57	0.320	0.125
3RD QUARTILE :	84.5	30.5	4.52	0.1051	3.63	0.520	0.170
VOL. WGT. MEAN :	*****	25.4	*****	0.0844	3.25	0.323	0.199

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : GOWGANDA/CUMULATIVE PRECIP.

#25

PERIOD OF REPORT : DEC 31,80 TO JAN 8,82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	12.000	9.000	10.000	9.000	10.000	11.000	10.0000
MAXIMUM :	0.220	1.300	0.115	0.320	0.180	0.930	0.2500
MINIMUM :	0.010	0.230	0.005	0.005	0.005	0.058	0.0040
RANGE :	0.210	1.070	0.110	0.315	0.175	0.872	0.2460
ARITH. MEAN :	0.119	0.562	0.036	0.066	0.064	0.372	0.0522
ARITH. STD. DEV :	0.074	0.336	0.036	0.098	0.046	0.245	0.0821
GEOM. MEAN :	0.091	0.489	0.022	0.035	0.049	0.297	0.0218
GEOM. STD. DEV. :	0.898	0.547	1.075	1.138	0.931	0.762	1.3107
1ST QUARTILE :	0.065	0.325	0.008	0.020	0.035	0.161	0.0070
2ND QUARTILE :	0.105	0.400	0.025	0.030	0.060	0.323	0.0200
3RD QUARTILE :	0.200	0.630	0.037	0.045	0.070	0.490	0.0235
VOL. WGT. MEAN :	0.092	0.515	0.033	0.103	0.053	0.340	0.0751

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : GOWGANDA/CUMULATIVE PRECIP.

#25

PERIOD OF REPORT : DEC 31,80 TO JAN 8,82

PAGE : 3

		MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	8.0000	9.0000	8.000	7.0000	8.0000	9.000	7.000
MAXIMUM	:	0.0130	0.0040	0.036	0.2141	0.0140	0.001	0.203
MINIMUM	:	0.0005	0.0005	0.004	0.0239	0.0005	0.001	0.010
RANGE	:	0.0125	0.0035	0.031	0.1901	0.0135	0.000	0.192
ARITH. MEAN	:	0.0044	0.0010	0.015	0.0701	0.0064	0.001	0.052
ARITH. STD. DEV	:	0.0040	0.0011	0.011	0.0680	0.0042	0.000	0.068
GEOM. MEAN	:	0.0031	0.0007	0.012	0.0519	0.0047	0.001	0.032
GEOM. STD. DEV.	:	0.9682	0.7027	0.733	0.7814	1.0218	0.000	1.020
1ST QUARTILE	:	0.0020	0.0005	0.007	0.0256	0.0040	0.001	0.011
2ND QUARTILE	:	0.0035	0.0005	0.011	0.0362	0.0060	0.001	0.026
3RD QUARTILE	:	0.0055	0.0007	0.021	0.0765	0.0085	0.001	0.045
VOL. WGT. MEAN	:	0.0047	0.0008	0.012	0.0741	0.0062	0.001	0.057

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : GOWGANDA/CUMULATIVE PRECIP. #25

PERIOD OF REPORT : DEC 31,80 TO JAN 8,82

PAGE : 4

	COPPER	CADMIUM	FREE H+ LAB MG/L
	MG/L	MG/L	
# OF SAMPLES :	9.0000	9.00000	12.0000
MAXIMUM :	0.0086	0.00120	0.0977
MINIMUM :	0.0012	0.00005	0.0129
RANGE :	0.0074	0.00115	0.0848
ARITH. MEAN :	0.0036	0.00038	0.0537
ARITH. STD. DEV :	0.0023	0.00035	0.0285
GEOM. MEAN :	0.0030	0.00027	0.0452
GEOM. STD. DEV. :	0.6008	0.95343	0.6647
1ST QUARTILE :	0.0020	0.00015	0.0304
2ND QUARTILE :	0.0026	0.00025	0.0556
3RD QUARTILE :	0.0039	0.00040	0.0776
VOL. WGT. MEAN :	0.0031	0.00033	0.0433

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : HURON PARK/CUMULATIVE PRECIP.

#06

PERIOD OF REPORT : OCT 2.81 TO DEC 31.81

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	3.0	1.0	1.00	1.0000	1.00	1.000	1.000
MAXIMUM :	121.3	24.5	4.39	0.0754	2.50	0.400	0.240
MINIMUM :	65.9	24.5	4.39	0.0754	2.50	0.400	0.240
RANGE :	55.4	0.0	0.00	0.0000	0.00	0.000	0.000
ARITH. MEAN :	100.2	*****	*****	*****	*****	*****	*****
ARITH. STD. DEV :	30.0	*****	*****	*****	*****	*****	*****
GEOM. MEAN :	96.8	*****	*****	*****	*****	*****	*****
GEOM. STD. DEV. :	0.3	*****	*****	*****	*****	*****	*****
1ST QUARTILE :	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****	*****	*****	*****
VOL. WGT. MEAN :	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : HURON PARK/CUMULATIVE PRECIP. #06

PERIOD OF REPORT : OCT 2,81 TO DEC 31,81 PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	1.000	1.000	1.000	1.000	1.000	1.000	1.0000
MAXIMUM :	0.080	0.370	0.025	0.020	0.020	0.356	0.0080
MINIMUM :	0.080	0.370	0.025	0.020	0.020	0.356	0.0080
RANGE :	0.000	0.000	0.000	0.000	0.000	0.000	0.0000
ARITH. MEAN :	*****	*****	*****	*****	*****	*****	*****
ARITH. STD. DEV :	*****	*****	*****	*****	*****	*****	*****
GEOM. MEAN :	*****	*****	*****	*****	*****	*****	*****
GEOM. STD. DEV. :	*****	*****	*****	*****	*****	*****	*****
1ST QUARTILE :	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****	*****	*****	*****
VOL. WGT. MEAN :	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : HURON PARK/CUMULATIVE PRECIP. #06

PERIOD OF REPORT : OCT 2,81 TO DEC 31,81

PAGE : 3

	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	1.0000	1.0000	1.000	1.0000	1.0000	1.000	0.000
MAXIMUM :	0.0020	0.0005	0.006	0.0286	0.0070	0.001	*****
MINIMUM :	0.0020	0.0005	0.006	0.0286	0.0070	0.001	*****
RANGE :	0.0000	0.0000	0.000	0.0000	0.0000	0.000	*****
ARITH. MEAN :	*****	*****	*****	*****	*****	*****	*****
ARITH. STD. DEV :	*****	*****	*****	*****	*****	*****	*****
GEOM. MEAN :	*****	*****	*****	*****	*****	*****	*****
GEOM. STD. DEV. :	*****	*****	*****	*****	*****	*****	*****
1ST QUARTILE :	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****	*****	*****	*****
VOL. WGT. MEAN :	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : HURON PARK/CUMULATIVE PRECIP.

#06

PERIOD OF REPORT : OCT 2,81 TO DEC 31,81

PAGE : 4

	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	1.0000	1.00000	1.0000
MAXIMUM :	0.0115	0.00010	0.0407
MINIMUM :	0.0115	0.00010	0.0407
RANGE :	0.0000	0.00000	0.0000
ARITH. MEAN :	*****	*****	*****
ARITH. STD. DEV :	*****	*****	*****
GEOM. MEAN :	*****	*****	*****
GEOM. STD. DEV. :	*****	*****	*****
1ST QUARTILE :	*****	*****	*****
2ND QUARTILE :	*****	*****	*****
3RD QUARTILE :	*****	*****	*****
VOL. WGT. MEAN :	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : KALADAR/CUMULATIVE PRECIP.

#14

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	10.0	11.00	10.0000	12.00	12.000	11.000
MAXIMUM :	172.0	54.5	5.05	0.1590	5.15	1.300	0.870
MINIMUM :	17.8	18.4	3.89	0.0332	0.25	0.160	0.040
RANGE :	154.2	36.1	1.16	0.1258	4.90	1.140	0.830
ARITH. MEAN :	86.6	36.9	4.27	0.1037	3.50	0.578	0.305
ARITH. STD. DEV :	41.1	12.0	0.34	0.0360	1.61	0.266	0.250
GEOM. MEAN :	75.4	35.0	4.26	0.0965	2.86	0.526	0.220
GEOM. STD. DEV. :	0.6	0.3	0.08	0.4381	0.85	0.476	0.902
1ST QUARTILE :	61.6	26.3	4.01	0.0850	2.27	0.495	0.105
2ND QUARTILE :	87.1	36.6	4.17	0.0942	3.65	0.530	0.205
3RD QUARTILE :	109.0	45.3	4.27	0.1269	5.07	0.640	0.390
VOL. WGT. MEAN :	*****	35.7	*****	0.1002	3.63	0.516	0.278

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : KALADAR/CUMULATIVE PRECIP.

#14

PERIOD OF REPORT : DEC 31.80 TO JAN 5.82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	12.000	10.000	11.000	12.000	12.000	12.000	10.0000
MAXIMUM :	0.520	1.410	0.100	0.250	0.330	0.980	0.0880
MINIMUM :	0.080	0.230	0.005	0.010	0.020	0.166	0.0030
RANGE :	0.440	1.180	0.095	0.240	0.310	0.814	0.0850
ARITH. MEAN :	0.253	0.566	0.043	0.067	0.137	0.430	0.0256
ARITH. STD. DEV :	0.153	0.333	0.035	0.072	0.114	0.228	0.0265
GEOM. MEAN :	0.210	0.501	0.028	0.044	0.088	0.378	0.0156
GEOM. STD. DEV. :	0.663	0.498	1.059	0.934	1.062	0.540	1.0904
1ST QUARTILE :	0.130	0.355	0.010	0.020	0.035	0.238	0.0065
2ND QUARTILE :	0.205	0.495	0.027	0.040	0.130	0.425	0.0135
3RD QUARTILE :	0.395	0.585	0.062	0.070	0.230	0.535	0.0335
VOL. WGT. MEAN :	0.221	0.566	0.042	0.072	0.129	0.442	0.0283

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : KALADAR/CUMULATIVE PRECIP.

#14

PERIOD OF REPORT : DEC 31.80 TO JAN 5.82

PAGE : 3

	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	7.0000	7.0000	6.000	6.0000	7.0000	7.000	7.000
MAXIMUM :	0.0080	0.0010	0.012	0.1730	0.0120	0.001	0.160
MINIMUM :	0.0010	0.0005	0.005	0.0153	0.0050	0.001	0.006
RANGE :	0.0070	0.0005	0.007	0.1577	0.0070	0.000	0.153
ARITH. MEAN :	0.0031	0.0006	0.008	0.0514	0.0086	0.001	0.040
ARITH. STD. DEV :	0.0023	0.0002	0.003	0.0602	0.0021	0.000	0.054
GEOM. MEAN :	0.0026	0.0006	0.007	0.0353	0.0083	0.001	0.023
GEOM. STD. DEV. :	0.6291	0.2620	0.345	0.8507	0.2702	0.000	1.041
1ST QUARTILE :	0.0015	0.0005	0.005	0.0178	0.0065	0.001	0.009
2ND QUARTILE :	0.0025	0.0005	0.008	0.0296	0.0080	0.001	0.016
3RD QUARTILE :	0.0030	0.0005	0.009	0.0361	0.0095	0.001	0.035
VOL. WGT. MEAN :	0.0028	0.0006	0.007	0.0380	0.0084	0.001	0.029

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : KALADAR/CUMULATIVE PRECIP.

#14

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 4

	COPPER	CADMIUM	FREE H+ LAB MG/L
	MG/L	MG/L	
# OF SAMPLES :	6.0000	7.00000	11.0000
MAXIMUM :	0.0160	0.00030	0.1288
MINIMUM :	0.0019	0.00005	0.0089
RANGE :	0.0142	0.00025	0.1199
ARITH. MEAN :	0.0050	0.00014	0.0665
ARITH. STD. DEV :	0.0055	0.00011	0.0353
GEOM. MEAN :	0.0036	0.00010	0.0540
GEOM. STD. DEV. :	0.8000	0.80138	0.7908
1ST QUARTILE :	0.0020	0.00005	0.0351
2ND QUARTILE :	0.0028	0.00008	0.0591
3RD QUARTILE :	0.0038	0.00020	0.0891
VOL. WGT. MEAN :	0.0040	0.00010	0.0648

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : KILLARNEY/CUMULATIVE PRECIP.

#23

PERIOD OF REPORT : JAN 5.81 TO JAN 5.82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	JMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	9.0	12.00	11.0000	11.00	10.000	12.000
MAXIMUM :	110.0	52.5	4.45	0.1392	6.05	0.720	0.850
MINIMUM :	19.0	19.9	3.96	0.0658	1.20	0.360	0.040
RANGE :	91.0	32.6	0.49	0.0734	4.85	0.360	0.810
ARITH. MEAN :	56.8	35.4	4.21	0.0999	3.63	0.548	0.331
ARITH. STD. DEV :	26.6	11.3	0.16	0.0226	1.65	0.135	0.269
GEOM. MEAN :	51.2	33.7	4.21	0.0976	3.23	0.532	0.224
GEOM. STD. DEV. :	0.5	0.3	0.04	0.2259	0.54	0.261	0.995
1ST QUARTILE :	41.0	23.9	4.09	0.0804	1.90	0.400	0.110
2ND QUARTILE :	52.6	34.8	4.23	0.0961	3.80	0.590	0.230
3RD QUARTILE :	64.0	40.3	4.32	0.1093	4.92	0.645	0.560
VOL. WGT. MEAN :	*****	36.7	*****	0.1035	3.67	0.527	0.276

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : KILLARNEY/CUMULATIVE PRECIP.

#23

PERIOD OF REPORT : JAN 5.81 TO JAN 5.82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	10.000	9.000	12.000	11.000	9.000	12.000	9.0000
MAXIMUM :	0.260	1.650	0.150	0.370	0.120	0.990	0.0750
MINIMUM :	0.020	0.220	0.005	0.010	0.020	0.170	0.0010
RANGE :	0.240	1.430	0.145	0.360	0.100	0.820	0.0740
ARITH. MEAN :	0.117	0.687	0.062	0.068	0.052	0.500	0.0151
ARITH. STD. DEV :	0.084	0.470	0.055	0.105	0.040	0.269	0.0230
GEOM. MEAN :	0.088	0.558	0.035	0.033	0.041	0.432	0.0077
GEOM. STD. DEV. :	0.861	0.691	1.261	1.190	0.734	0.578	1.1890
1ST QUARTILE :	0.040	0.300	0.015	0.010	0.020	0.269	0.0040
2ND QUARTILE :	0.100	0.460	0.045	0.030	0.030	0.415	0.0065
3RD QUARTILE :	0.160	0.885	0.105	0.070	0.065	0.715	0.0105
VOL. WGT. MEAN :	0.104	0.657	0.047	0.046	0.043	0.493	0.0143

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : KILLARNEY/CUMULATIVE PRECIP.

#23

PERIOD OF REPORT : JAN 5.81 TO JAN 5.82

PAGE : 3

		MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	8.0000	8.0000	8.000	5.0000	8.0000	8.000	6.000
MAXIMUM	:	0.0210	0.0050	0.029	0.0774	0.0130	0.001	0.636
MINIMUM	:	0.0010	0.0005	0.005	0.0147	0.0020	0.001	0.004
RANGE	:	0.0200	0.0045	0.024	0.0627	0.0110	0.000	0.632
ARITH. MEAN	:	0.0056	0.0014	0.015	0.0357	0.0072	0.001	0.114
ARITH. STD. DEV	:	0.0069	0.0015	0.009	0.0249	0.0032	0.000	0.256
GEOM. MEAN	:	0.0031	0.0010	0.012	0.0300	0.0065	0.001	0.018
GEOM. STD. DEV.	:	1.1645	0.8023	0.683	0.6438	0.5452	0.000	1.842
1ST QUARTILE	:	0.0010	0.0005	0.006	0.0168	0.0060	0.001	0.005
2ND QUARTILE	:	0.0025	0.0010	0.015	0.0253	0.0070	0.001	0.010
3RD QUARTILE	:	0.0080	0.0015	0.021	0.0338	0.0085	0.001	0.016
VOL. WGT. MEAN	:	0.0049	0.0013	0.013	0.0328	0.0069	0.001	0.085

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : KILLARNEY/CUMULATIVE PRECIP.

#23

PERIOD OF REPORT : JAN 5.81 TO JAN 5.82

PAGE : 4

	COPPER	CADMIUM	FREE H+ LAB MG/L
	MG/L	MG/L	MG/L
# OF SAMPLES :	7.0000	8.00000	12.0000
MAXIMUM :	0.0081	0.00040	0.1096
MINIMUM :	0.0021	0.00005	0.0355
RANGE :	0.0060	0.00035	0.0742
ARITH. MEAN :	0.0045	0.00022	0.0660
ARITH. STD. DEV. :	0.0024	0.00014	0.0249
GEOM. MEAN :	0.0039	0.00018	0.0619
GEOM. STD. DEV. :	0.5587	0.74525	0.3716
1ST QUARTILE :	0.0022	0.00010	0.0479
2ND QUARTILE :	0.0032	0.00020	0.0584
3RD QUARTILE :	0.0063	0.00035	0.0823
VOL. WGT. MEAN :	0.0040	0.00019	0.0689

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MATTAWA/CUMULATIVE PRECIP.

#22

PERIOD OF REPORT : JAN 5.81 TO JAN 5.82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	9.0	10.00	9.0000	10.00	10.000	10.000
MAXIMUM :	188.0	43.5	4.65	0.1212	5.20	0.670	0.740
MINIMUM :	21.0	19.3	4.04	0.0594	1.65	0.260	0.060
RANGE :	167.0	24.2	0.61	0.0618	3.55	0.410	0.680
ARITH. MEAN :	79.4	28.8	4.34	0.0863	2.94	0.414	0.226
ARITH. STD. DEV :	48.2	8.6	0.20	0.0213	1.10	0.144	0.204
GEOM. MEAN :	66.9	27.8	4.33	0.0840	2.78	0.393	0.169
GEOM. STD. DEV. :	0.6	0.3	0.05	0.2421	0.36	0.335	0.788
1ST QUARTILE :	41.4	21.9	4.17	0.0675	1.97	0.280	0.070
2ND QUARTILE :	67.0	25.5	4.28	0.0831	2.70	0.360	0.185
3RD QUARTILE :	104.0	29.9	4.45	0.0889	3.38	0.490	0.210
VOL. WGT. MEAN :	*****	29.8	*****	0.0887	3.14	0.375	0.225

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MATTAWA/CUMULATIVE PRECIP.

#22

PERIOD OF REPORT : JAN 5.81 TO JAN 5.82

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	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	10.000	9.000	9.000	10.000	9.000	10.000	9.0000
MAXIMUM :	0.350	0.780	0.110	0.230	0.500	0.560	0.0220
MINIMUM :	0.040	0.140	0.005	0.020	0.020	0.122	0.0010
RANGE :	0.310	0.640	0.105	0.210	0.480	0.438	0.0210
ARITH. MEAN :	0.156	0.443	0.042	0.068	0.112	0.305	0.0112
ARITH. STD. DEV. :	0.089	0.233	0.035	0.061	0.150	0.154	0.0082
GEOM. MEAN :	0.133	0.387	0.028	0.053	0.068	0.272	0.0075
GEOM. STD. DEV. :	0.619	0.574	1.042	0.688	0.982	0.507	1.1046
1ST QUARTILE :	0.085	0.265	0.010	0.030	0.030	0.179	0.0030
2ND QUARTILE :	0.140	0.355	0.032	0.050	0.055	0.243	0.0090
3RD QUARTILE :	0.185	0.540	0.052	0.075	0.100	0.397	0.0170
VOL. WGT. MEAN :	0.148	0.450	0.038	0.070	0.069	0.321	0.0135

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MATTAWA/CUMULATIVE PRECIP.

#22

PERIOD OF REPORT : JAN 5.81 TO JAN 5.82

PAGE : 3

		MANGANESE	VICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	9.0000	9.0000	6.000	6.0000	9.0000	9.000	6.000
MAXIMUM	:	0.0140	0.0070	0.015	0.2629	0.0140	0.001	0.255
MINIMUM	:	0.0010	0.0005	0.002	0.0162	0.0030	0.001	0.004
RANGE	:	0.0130	0.0065	0.013	0.2467	0.0110	0.000	0.251
ARITH. MEAN	:	0.0053	0.0021	0.008	0.0961	0.0067	0.001	0.089
ARITH. STD. DEV	:	0.0044	0.0022	0.005	0.0863	0.0037	0.000	0.094
GEOM. MEAN	:	0.0039	0.0013	0.007	0.0700	0.0058	0.001	0.043
GEOM. STD. DEV.	:	0.8646	1.0184	0.713	0.9057	0.5468	0.000	1.574
1ST QUARTILE	:	0.0020	0.0005	0.003	0.0361	0.0035	0.001	0.008
2ND QUARTILE	:	0.0030	0.0012	0.007	0.0714	0.0055	0.001	0.073
3RD QUARTILE	:	0.0065	0.0020	0.011	0.0904	0.0075	0.001	0.113
VOL. WGT. MEAN	:	0.0049	0.0016	0.007	0.1016	0.0062	0.001	0.094

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MATTAWA/CUMULATIVE PRECIP.

#22

PERIOD OF REPORT : JAN 5.81 TO JAN 5.82

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		COPPER	CADMIUM	FREE H+ LAB MG/L
		MG/L	MG/L	
# OF SAMPLES	:	7.0000	9.00000	10.0000
MAXIMUM	:	0.0080	0.00080	0.0912
MINIMUM	:	0.0008	0.00005	0.0224
RANGE	:	0.0072	0.00075	0.0688
ARITH. MEAN	:	0.0035	0.00024	0.0504
ARITH. STD. DEV	:	0.0025	0.00024	0.0216
GEOM. MEAN	:	0.0027	0.00016	0.0460
GEOM. STD. DEV.	:	0.7681	1.00615	0.4608
1ST QUARTILE	:	0.0012	0.00005	0.0277
2ND QUARTILE	:	0.0026	0.00015	0.0525
3RD QUARTILE	:	0.0042	0.00030	0.0590
VOL. WGT. MEAN	:	0.0027	0.00023	0.0552

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : MCKELLAR/CUMULATIVE PRECIP.

#21

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	8.0	9.00	9.0000	9.00	9.000	10.000
MAXIMUM :	190.0	51.0	4.69	0.1658	4.65	0.840	0.950
MINIMUM :	30.3	21.5	3.96	0.0590	1.25	0.290	0.090
RANGE :	159.7	29.5	0.73	0.1068	3.40	0.550	0.860
ARITH. MEAN :	89.3	30.4	4.27	0.0962	2.93	0.493	0.288
ARITH. STD. DEV :	49.5	9.8	0.23	0.0340	1.18	0.171	0.247
GEOM. MEAN :	75.9	29.3	4.27	0.0915	2.70	0.468	0.230
GEOM. STD. DEV. :	0.6	0.3	0.05	0.3309	0.44	0.341	0.659
1ST QUARTILE :	37.5	24.1	4.08	0.0696	1.92	0.350	0.130
2ND QUARTILE :	87.0	27.5	4.21	0.0832	2.65	0.460	0.230
3RD QUARTILE :	120.6	33.8	4.38	0.1036	3.40	0.530	0.300
VOL. WGT. MEAN :	*****	30.9	*****	0.0932	3.17	0.520	0.306

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MCKELLAR/CUMULATIVE PRECIP.

#21

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	9.000	8.000	9.000	9.000	7.000	8.000	9.0000
MAXIMUM :	0.520	1.000	0.175	0.230	0.320	0.780	0.0550
MINIMUM :	0.010	0.260	0.002	0.020	0.010	0.246	0.0020
RANGE :	0.510	0.740	0.173	0.210	0.310	0.534	0.0530
ARITH. MEAN :	0.241	0.616	0.055	0.071	0.119	0.459	0.0176
ARITH. STD. DEV :	0.186	0.267	0.050	0.067	0.117	0.188	0.0181
GEOM. MEAN :	0.151	0.564	0.035	0.052	0.067	0.429	0.0104
GEOM. STD. DEV. :	1.267	0.459	1.191	0.812	1.282	0.386	1.1417
1ST QUARTILE :	0.080	0.430	0.023	0.025	0.015	0.343	0.0035
2ND QUARTILE :	0.180	0.540	0.045	0.045	0.055	0.400	0.0090
3RD QUARTILE :	0.310	0.865	0.055	0.070	0.185	0.580	0.0190
VOL. WGT. MEAN :	0.191	0.597	0.060	0.084	0.091	0.497	0.0156

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MCKELLAR/CUMULATIVE PRECIP.

#21

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 3

	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	8.0000	8.0000	8.000	8.0000	8.0000	8.000	8.000
MAXIMUM :	0.0170	0.0030	0.038	0.2369	0.0090	0.002	0.209
MINIMUM :	0.0005	0.0005	0.002	0.0040	0.0005	0.001	0.005
RANGE :	0.0165	0.0025	0.036	0.2329	0.0085	0.001	0.204
ARITH. MEAN :	0.0046	0.0011	0.013	0.0777	0.0054	0.001	0.051
ARITH. STD. DEV. :	0.0054	0.0009	0.011	0.0904	0.0030	0.000	0.069
GEOM. MEAN :	0.0026	0.0009	0.010	0.0394	0.0042	0.001	0.025
GEOM. STD. DEV. :	1.1512	0.7060	0.833	1.3497	0.9586	0.321	1.270
1ST QUARTILE :	0.0010	0.0005	0.007	0.0219	0.0030	0.001	0.010
2ND QUARTILE :	0.0030	0.0007	0.011	0.0363	0.0060	0.001	0.022
3RD QUARTILE :	0.0055	0.0015	0.013	0.1319	0.0080	0.002	0.065
VOL. WGT. MEAN :	0.0046	0.0009	0.011	0.0735	0.0054	0.001	0.057

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MCKELLAR/CUMULATIVE PRECIP.

#21

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 4

	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	8.0000	8.00000	9.0000
MAXIMUM :	0.0080	0.00070	0.1096
MINIMUM :	0.0034	0.00005	0.0204
RANGE :	0.0046	0.00065	0.0892
ARITH. MEAN :	0.0049	0.00026	0.0599
ARITH. STD. DEV :	0.0017	0.00023	0.0297
GEOM. MEAN :	0.0047	0.00017	0.0532
GEOM. STD. DEV. :	0.3371	1.02428	0.5378
1ST QUARTILE :	0.0035	0.00008	0.0361
2ND QUARTILE :	0.0045	0.00020	0.0505
3RD QUARTILE :	0.0061	0.00040	0.0692
VOL. WGT. MEAN :	0.0049	0.00020	0.0581

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MERLIN/CUMULATIVE PRECIP.

#02

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	JMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	11.0	10.00	11.0000	12.00	12.000	9.000
MAXIMUM :	141.6	65.0	4.43	0.1646	8.80	1.510	0.860
MINIMUM :	13.0	15.4	3.89	0.0392	3.00	0.440	0.220
RANGE :	128.6	49.6	0.54	0.1254	5.80	1.070	0.640
ARITH. MEAN :	70.3	41.1	4.15	0.1003	5.27	0.775	0.548
ARITH. STD. DEV :	42.5	14.3	0.16	0.0396	1.81	0.345	0.237
GEOM. MEAN :	55.9	38.6	4.15	0.0922	5.01	0.716	0.498
GEOM. STD. DEV. :	0.8	0.4	0.04	0.4562	0.33	0.404	0.481
1ST QUARTILE :	39.5	31.3	4.01	0.0607	4.00	0.520	0.325
2ND QUARTILE :	70.0	38.4	4.15	0.0993	4.72	0.690	0.485
3RD QUARTILE :	90.5	45.9	4.23	0.1181	6.63	0.880	0.710
VOL. WGT. MEAN :	*****	40.2	*****	0.1040	4.74	0.637	0.495

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MERLIN/CUMULATIVE PRECIP.

#02

PERIOD OF REPORT : DEC 31.80 TO JAN 5.82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	12.000	11.000	9.000	11.000	11.000	11.000	11.0000
MAXIMUM :	1.040	2.620	0.360	0.140	0.360	2.050	0.0700
MINIMUM :	0.080	0.320	0.040	0.020	0.010	0.130	0.0030
RANGE :	0.960	2.300	0.320	0.120	0.350	1.920	0.0670
ARITH. MEAN :	0.341	0.862	0.129	0.078	0.115	0.681	0.0259
ARITH. STD. DEV. :	0.277	0.615	0.097	0.037	0.125	0.507	0.0228
GEOM. MEAN :	0.263	0.740	0.104	0.069	0.064	0.553	0.0178
GEOM. STD. DEV. :	0.743	0.536	0.706	0.574	1.185	0.684	0.9498
1ST QUARTILE :	0.140	0.500	0.052	0.045	0.020	0.370	0.0085
2ND QUARTILE :	0.265	0.700	0.113	0.070	0.050	0.540	0.0150
3RD QUARTILE :	0.415	0.895	0.132	0.105	0.135	0.695	0.0370
VOL. WGT. MEAN :	0.240	0.679	0.114	0.066	0.091	0.536	0.0213

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MERLIN/CUMULATIVE PRECIP.

#02

PERIOD OF REPORT : DEC 31.80 TO JAN 5.82

PAGE : 3

	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	8.0000	9.0000	8.000	8.0000	9.0000	9.000	7.000
MAXIMUM :	0.0060	0.0040	0.020	0.1480	0.0120	0.001	0.139
MINIMUM :	0.0020	0.0005	0.004	0.0356	0.0040	0.001	0.027
RANGE :	0.0040	0.0035	0.016	0.1124	0.0080	0.000	0.112
ARITH. MEAN :	0.0042	0.0014	0.009	0.0698	0.0086	0.001	0.059
ARITH. STD. DEV :	0.0015	0.0012	0.005	0.0377	0.0026	0.000	0.038
GEOM. MEAN :	0.0040	0.0010	0.009	0.0626	0.0081	0.001	0.051
GEOM. STD. DEV. :	0.3918	0.8489	0.495	0.4770	0.3606	0.000	0.557
1ST QUARTILE :	0.0030	0.0005	0.007	0.0453	0.0065	0.001	0.028
2ND QUARTILE :	0.0045	0.0005	0.009	0.0546	0.0090	0.001	0.048
3RD QUARTILE :	0.0055	0.0020	0.010	0.0873	0.0100	0.001	0.059
VOL. WGT. MEAN :	0.0038	0.0013	0.008	0.0689	0.0079	0.001	0.059

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MERLIN/CUMULATIVE PRECIP.

#02

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 4

	COPPER	CADMIUM	FREE H+ LAB MG/L
	MG/L	MG/L	MG/L
# OF SAMPLES :	7.0000	9.00000	10.0000
MAXIMUM :	0.0083	0.00040	0.1288
MINIMUM :	0.0013	0.00005	0.0372
RANGE :	0.0071	0.00035	0.0917
ARITH. MEAN :	0.0035	0.00019	0.0753
ARITH. STD. DEV :	0.0024	0.00011	0.0289
GEOM. MEAN :	0.0029	0.00017	0.0706
GEOM. STD. DEV. :	0.6168	0.63406	0.3787
1ST QUARTILE :	0.0016	0.00010	0.0513
2ND QUARTILE :	0.0024	0.00020	0.0700
3RD QUARTILE :	0.0040	0.00020	0.0813
VOL. WGT. MEAN :	0.0038	0.00018	0.0761

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MILTON/CUMULATIVE PRECIP.

#10

PERIOD OF REPORT : DEC 31.80 TO JAN 5.82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	JMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	10.0	6.00	11.0000	11.00	11.000	7.000
MAXIMUM :	117.9	64.5	4.54	0.1604	7.45	1.280	0.840
MINIMUM :	16.9	17.8	3.88	0.0286	2.75	0.370	0.290
RANGE :	101.0	46.7	0.66	0.1318	4.70	0.910	0.550
ARITH. MEAN :	68.2	34.6	4.24	0.0746	4.99	0.712	0.573
ARITH. STD. DEV :	33.4	15.4	0.25	0.0456	1.77	0.259	0.201
GEOM. MEAN :	59.6	32.0	4.23	0.0629	4.69	0.671	0.541
GEOM. STD. DEV. :	0.6	0.4	0.06	0.6174	0.37	0.362	0.377
1ST QUARTILE :	47.3	22.9	3.97	0.0322	3.05	0.455	0.360
2ND QUARTILE :	60.7	29.8	4.22	0.0661	4.35	0.715	0.490
3RD QUARTILE :	99.6	37.2	4.38	0.0913	6.55	0.780	0.735
VOL. WGT. MEAN :	*****	35.6	*****	0.0822	4.73	0.640	0.520

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MILTON/CUMULATIVE PRECIP.

#10

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	7.000	9.000	3.000	7.000	9.000	12.000	8.0000
MAXIMUM :	0.800	1.550	0.210	0.140	0.550	1.410	0.0850
MINIMUM :	0.160	0.420	0.065	0.020	0.010	0.352	0.0005
RANGE :	0.640	1.130	0.145	0.120	0.540	1.058	0.0845
ARITH. MEAN :	0.367	0.950	0.138	0.066	0.209	0.747	0.0302
ARITH. STD. DEV :	0.235	0.465	0.073	0.041	0.201	0.345	0.0261
GEOM. MEAN :	0.308	0.843	0.124	0.056	0.120	0.675	0.0158
GEOM. STD. DEV. :	0.642	0.531	0.596	0.630	1.296	0.477	1.6416
1ST QUARTILE :	0.160	0.500	*****	0.030	0.060	0.420	0.0130
2ND QUARTILE :	0.265	0.740	*****	0.050	0.125	0.720	0.0285
3RD QUARTILE :	0.460	1.310	*****	0.080	0.210	1.050	0.0365
VOL. WGT. MEAN :	0.315	0.840	0.116	0.057	0.175	0.703	0.0283

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MILTON/CUMULATIVE PRECIP.

#10

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 3

	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	7.0000	10.0000	6.000	7.0000	9.0000	10.000	6.000
MAXIMUM :	0.0170	0.0030	0.021	0.1930	0.0250	0.003	0.080
MINIMUM :	0.0030	0.0005	0.008	0.0237	0.0090	0.001	0.016
RANGE :	0.0140	0.0025	0.013	0.1693	0.0160	0.002	0.063
ARITH. MEAN :	0.0069	0.0009	0.016	0.0991	0.0158	0.001	0.049
ARITH. STD. DEV. :	0.0049	0.0008	0.005	0.0652	0.0062	0.001	0.021
GEOM. MEAN :	0.0057	0.0007	0.015	0.0767	0.0147	0.001	0.044
GEOM. STD. DEV. :	0.6268	0.5919	0.402	0.8388	0.4001	0.347	0.542
1ST QUARTILE :	0.0030	0.0005	0.010	0.0272	0.0100	0.001	0.028
2ND QUARTILE :	0.0050	0.0005	0.018	0.0866	0.0135	0.001	0.048
3RD QUARTILE :	0.0075	0.0010	0.020	0.1367	0.0190	0.001	0.055
VOL. WGT. MEAN :	0.0057	0.0007	0.014	0.0770	0.0144	0.001	0.045

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MILTON/CUMULATIVE PRECIP.

#10

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 4

	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	6.0000	10.00000	6.0000
MAXIMUM :	0.0081	0.00290	0.1318
MINIMUM :	0.0008	0.00005	0.0288
RANGE :	0.0073	0.00285	0.1030
ARITH. MEAN :	0.0033	0.00041	0.0667
ARITH. STD. DEV :	0.0027	0.00088	0.0387
GEOM. MEAN :	0.0024	0.00016	0.0580
GEOM. STD. DEV. :	0.8967	1.15286	0.5834
1ST QUARTILE :	0.0008	0.00008	0.0306
2ND QUARTILE :	0.0030	0.00015	0.0600
3RD QUARTILE :	0.0034	0.00020	0.0774
VOL. WGT. MEAN :	0.0033	0.00033	0.0680

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MOONBEAM/CUMULATIVE PRECIP.

#27

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	6.0	6.00	8.0000	11.00	11.000	8.000
MAXIMUM :	91.0	24.2	4.72	0.1034	2.60	0.700	0.780
MINIMUM :	20.0	13.3	4.28	0.0342	1.25	0.110	0.050
RANGE :	71.0	10.9	0.44	0.0692	1.35	0.590	0.730
ARITH. MEAN :	52.3	18.4	4.46	0.0578	1.89	0.316	0.232
ARITH. STD. DEV :	26.0	5.0	0.16	0.0248	0.42	0.208	0.241
GEOM. MEAN :	46.3	17.9	4.46	0.0535	1.84	0.257	0.157
GEOM. STD. DEV. :	0.5	0.3	0.04	0.4170	0.23	0.684	0.938
1ST QUARTILE :	32.5	13.3	4.30	0.0349	1.52	0.120	0.065
2ND QUARTILE :	45.0	17.9	4.43	0.0537	1.77	0.210	0.175
3RD QUARTILE :	76.5	22.1	4.51	0.0738	2.30	0.430	0.275
VOL. WGT. MEAN :	*****	17.6	*****	0.0579	1.84	0.263	0.171

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MOONBEAM/CUMULATIVE PRECIP.

#27

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	11.000	7.000	8.000	9.000	9.000	10.000	8.0000
MAXIMUM :	0.270	0.720	0.205	0.350	0.150	0.720	0.1600
MINIMUM :	0.005	0.220	0.005	0.010	0.005	0.068	0.0040
RANGE :	0.265	0.500	0.200	0.340	0.145	0.652	0.1560
ARITH. MEAN :	0.120	0.440	0.057	0.080	0.051	0.340	0.0372
ARITH. STD. DEV :	0.083	0.212	0.075	0.106	0.048	0.182	0.0517
GEOM. MEAN :	0.082	0.396	0.025	0.045	0.032	0.289	0.0193
GEOM. STD. DEV. :	1.125	0.503	1.396	1.086	1.103	0.653	1.2052
1ST QUARTILE :	0.040	0.230	0.008	0.020	0.015	0.193	0.0085
2ND QUARTILE :	0.090	0.325	0.025	0.030	0.025	0.346	0.0175
3RD QUARTILE :	0.175	0.625	0.090	0.080	0.065	0.405	0.0410
VOL. WGT. MEAN :	0.092	0.449	0.050	0.085	0.043	0.347	0.0395

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MOONBEAM/CUMULATIVE PRECIP.

#27

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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		MANGANESE	VICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	6.0000	6.0000	6.000	6.0000	6.0000	6.000	6.000
MAXIMUM	:	0.0050	0.0010	0.031	0.0328	0.0070	0.001	0.031
MINIMUM	:	0.0005	0.0005	0.002	0.0105	0.0010	0.001	0.004
RANGE	:	0.0045	0.0005	0.029	0.0223	0.0060	0.000	0.028
ARITH. MEAN	:	0.0024	0.0006	0.011	0.0225	0.0033	0.001	0.018
ARITH. STD. DEV	:	0.0016	0.0002	0.010	0.0083	0.0024	0.000	0.011
GEOM. MEAN	:	0.0019	0.0006	0.008	0.0211	0.0026	0.001	0.014
GEOM. STD. DEV.	:	0.8426	0.2830	0.843	0.4200	0.8351	0.000	0.803
1ST QUARTILE	:	0.0007	0.0005	0.004	0.0135	0.0010	0.001	0.007
2ND QUARTILE	:	0.0025	0.0005	0.007	0.0230	0.0030	0.001	0.016
3RD QUARTILE	:	0.0030	0.0005	0.009	0.0272	0.0045	0.001	0.024
VOL. WGT. MEAN	:	0.0025	0.0006	0.011	0.0229	0.0031	0.001	0.018

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MOONBEAM/CUMULATIVE PRECIP.

#27

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	6.0000	6.00000	6.0000
MAXIMUM :	0.0073	0.00140	0.0525
MINIMUM :	0.0007	0.00005	0.0191
RANGE :	0.0066	0.00135	0.0334
ARITH. MEAN :	0.0037	0.00029	0.0366
ARITH. STD. DEV :	0.0030	0.00054	0.0122
GEOM. MEAN :	0.0026	0.00011	0.0347
GEOM. STD. DEV. :	0.9753	1.29258	0.3693
1ST QUARTILE :	0.0010	0.00005	0.0233
2ND QUARTILE :	0.0028	0.00008	0.0368
3RD QUARTILE :	0.0057	0.00010	0.0424
VOL. WGT. MEAN :	0.0034	0.00026	0.0345

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : NAKINA/CUMULATIVE PRECIP.

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PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	JMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	9.0	3.00	11.0000	11.00	11.000	7.000
MAXIMUM :	80.0	31.2	5.09	0.0778	3.45	0.500	0.800
MINIMUM :	6.3	10.0	4.37	0.0260	0.30	0.070	0.060
RANGE :	73.7	21.2	0.72	0.0518	3.15	0.430	0.740
ARITH. MEAN :	35.6	17.9	4.67	0.0383	1.78	0.298	0.439
ARITH. STD. DEV :	19.8	7.0	0.38	0.0159	1.09	0.157	0.332
GEOM. MEAN :	30.2	16.8	4.66	0.0361	1.42	0.254	0.301
GEOM. STD. DEV. :	0.7	0.4	0.08	0.3429	0.78	0.644	1.051
1ST QUARTILE :	21.3	12.5	*****	0.0263	0.65	0.150	0.080
2ND QUARTILE :	33.1	15.3	*****	0.0336	1.52	0.245	0.285
3RD QUARTILE :	43.3	18.7	*****	0.0373	2.55	0.455	0.770
VOL. WGT. MEAN :	*****	16.3	*****	0.0384	1.78	0.283	0.458

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : NAKINA/CUMULATIVE PRECIP.

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PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	11.000	11.000	7.000	11.000	10.000	11.000	11.0000
MAXIMUM :	0.230	1.000	0.170	0.210	0.130	0.850	0.0550
MINIMUM :	0.040	0.160	0.005	0.005	0.010	0.112	0.0010
RANGE :	0.190	0.840	0.165	0.205	0.120	0.738	0.0540
ARITH. MEAN :	0.129	0.472	0.087	0.048	0.046	0.320	0.0231
ARITH. STD. DEV :	0.067	0.287	0.071	0.058	0.040	0.214	0.0173
GEOM. MEAN :	0.114	0.397	0.049	0.030	0.035	0.268	0.0146
GEOM. STD. DEV. :	0.538	0.623	1.417	0.967	0.770	0.616	1.2592
1ST QUARTILE :	0.085	0.215	0.008	0.020	0.020	0.138	0.0060
2ND QUARTILE :	0.095	0.365	0.060	0.020	0.030	0.261	0.0190
3RD QUARTILE :	0.190	0.710	0.152	0.050	0.040	0.385	0.0290
VOL. WGT. MEAN :	0.120	0.474	0.090	0.064	0.042	0.294	0.0266

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : NAKINA/CUMULATIVE PRECIP.

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PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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		MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINIUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	9.0000	9.0000	8.000	6.0000	9.0000	9.000	7.000
MAXIMUM	:	0.0300	0.0005	0.015	0.2371	0.0060	0.002	0.123
MINIMUM	:	0.0010	0.0005	0.003	0.0362	0.0020	0.001	0.009
RANGE	:	0.0290	0.0000	0.012	0.2009	0.0040	0.001	0.114
ARITH. MEAN	:	0.0074	0.0005	0.009	0.1132	0.0038	0.001	0.062
ARITH. STD. DEV	:	0.0088	0.0000	0.004	0.0788	0.0016	0.000	0.045
GEOM. MEAN	:	0.0048	0.0005	0.008	0.0909	0.0034	0.001	0.047
GEOM. STD. DEV.	:	0.9626	0.0000	0.569	0.7415	0.4617	0.231	0.915
1ST QUARTILE	:	0.0025	0.0005	0.005	0.0439	0.0020	0.001	0.016
2ND QUARTILE	:	0.0045	0.0005	0.008	0.0938	0.0035	0.001	0.048
3RD QUARTILE	:	0.0070	0.0005	0.013	0.1474	0.0045	0.001	0.092
VOL. WGT. MEAN	:	0.0075	0.0005	0.010	0.1148	0.0039	0.001	0.058

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : NAKINA/CUMULATIVE PRECIP.

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PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	8.0000	8.00000	3.0000
MAXIMUM :	0.0156	0.00030	0.0427
MINIMUM :	0.0014	0.00005	0.0081
RANGE :	0.0142	0.00025	0.0345
ARITH. MEAN :	0.0053	0.00010	0.0265
ARITH. STD. DEV :	0.0054	0.00008	0.0174
GEOM. MEAN :	0.0034	0.00008	0.0215
GEOM. STD. DEV. :	0.9902	0.63002	0.8666
1ST QUARTILE :	0.0015	0.00005	*****
2ND QUARTILE :	0.0025	0.00008	*****
3RD QUARTILE :	0.0088	0.00010	*****
VOL. WGT. MEAN :	0.0053	0.00010	0.0309

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PALMERSTON/CUMULATIVE PRECIP.

#08

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	11.0	9.00	11.0000	12.00	11.000	9.000
MAXIMUM :	132.0	55.0	4.56	0.1360	6.70	0.820	0.820
MINIMUM :	17.0	22.8	4.08	0.0336	2.50	0.360	0.210
RANGE :	115.0	32.2	0.48	0.1024	4.20	0.460	0.610
ARITH. MEAN :	67.9	33.1	4.33	0.0803	4.26	0.575	0.398
ARITH. STD. DEV :	34.1	10.5	0.16	0.0294	1.37	0.162	0.204
GEOM. MEAN :	58.7	31.7	4.32	0.0751	4.06	0.555	0.360
GEOM. STD. DEV. :	0.6	0.3	0.04	0.3982	0.32	0.284	0.460
1ST QUARTILE :	40.0	23.8	4.18	0.0558	3.10	0.425	0.245
2ND QUARTILE :	73.0	30.2	4.34	0.0741	4.30	0.520	0.310
3RD QUARTILE :	80.8	38.1	4.39	0.0962	5.00	0.715	0.415
VOL. WGT. MEAN :	*****	34.2	*****	0.0850	4.39	0.558	0.409

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE (1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PALMERSTON/CUMULATIVE PRECIP.

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PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	11.000	10.000	10.000	12.000	11.000	12.000	11.0000
MAXIMUM :	0.510	1.820	0.200	0.150	0.300	1.250	0.0600
MINIMUM :	0.070	0.380	0.050	0.010	0.005	0.350	0.0060
RANGE :	0.440	1.440	0.150	0.140	0.295	0.900	0.0540
ARITH. MEAN :	0.209	0.928	0.103	0.058	0.120	0.752	0.0203
ARITH. STD. DEV :	0.146	0.393	0.055	0.035	0.098	0.260	0.0164
GEOM. MEAN :	0.167	0.859	0.091	0.049	0.074	0.711	0.0160
GEOM. STD. DEV. :	0.713	0.420	0.529	0.655	1.236	0.357	0.6954
1ST QUARTILE :	0.080	0.645	0.055	0.040	0.025	0.595	0.0085
2ND QUARTILE :	0.155	0.840	0.087	0.050	0.085	0.675	0.0145
3RD QUARTILE :	0.265	1.060	0.130	0.070	0.190	0.950	0.0200
VOL. WGT. MEAN :	0.201	0.839	0.111	0.062	0.104	0.707	0.0188

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PALMERSTON/CUMULATIVE PRECIP.

#08

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	10.0000	10.0000	9.000	8.0000	9.0000	10.000	9.000
MAXIMUM :	0.0130	0.0040	0.038	0.1073	0.0150	0.001	0.127
MINIMUM :	0.0020	0.0005	0.004	0.0208	0.0020	0.001	0.019
RANGE :	0.0110	0.0035	0.034	0.0865	0.0130	0.000	0.108
ARITH. MEAN :	0.0046	0.0009	0.013	0.0612	0.0073	0.001	0.050
ARITH. STD. DEV :	0.0035	0.0011	0.010	0.0353	0.0039	0.000	0.033
GEOM. MEAN :	0.0038	0.0007	0.011	0.0522	0.0063	0.001	0.042
GEOM. STD. DEV. :	0.6380	0.6696	0.626	0.6169	0.6061	0.000	0.594
1ST QUARTILE :	0.0020	0.0005	0.007	0.0346	0.0040	0.001	0.026
2ND QUARTILE :	0.0030	0.0005	0.009	0.0466	0.0070	0.001	0.038
3RD QUARTILE :	0.0055	0.0005	0.013	0.0994	0.0085	0.001	0.053
VOL. WGT. MEAN :	0.0048	0.0011	0.016	0.0645	0.0079	0.001	0.050

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PALMERSTON/CUMULATIVE PRECIP. #08

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	COPPER	CADMIUM	FREE H+ LAB MG/L
	MG/L	MG/L	MG/L
# OF SAMPLES :	8.0000	9.00000	9.0000
MAXIMUM :	0.0101	0.00050	0.0832
MINIMUM :	0.0009	0.00005	0.0275
RANGE :	0.0092	0.00045	0.0556
ARITH. MEAN :	0.0047	0.00022	0.0501
ARITH. STD. DEV :	0.0030	0.00017	0.0189
GEOM. MEAN :	0.0037	0.00016	0.0473
GEOM. STD. DEV. :	0.8032	0.88191	0.3604
1ST QUARTILE :	0.0021	0.00008	0.0368
2ND QUARTILE :	0.0049	0.00015	0.0432
3RD QUARTILE :	0.0064	0.00030	0.0514
VOL. WGT. MEAN :	0.0052	0.00025	0.0500

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY.

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STATION NAME : PICKLE LAKE/CUMULATIVE PRECIP.

#36

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	CALCIUM MG/L
# OF SAMPLES :	12.0	4.0	7.00	8.0000	9.00	11.000	7.000
MAXIMUM :	87.7	25.4	6.35	0.0800	4.30	0.570	0.490
MINIMUM :	9.0	12.2	4.70	0.0254	0.55	0.110	0.100
RANGE :	78.7	13.2	1.65	0.0546	3.75	0.460	0.390
ARITH. MEAN :	42.4	16.2	5.24	0.0451	1.46	0.247	0.314
ARITH. STD. DEV :	24.0	6.2	0.64	0.0191	1.10	0.153	0.154
GEOM. MEAN :	35.5	15.5	5.21	0.0419	1.25	0.216	0.275
GEOM. STD. DEV. :	0.7	0.3	0.12	0.4065	0.54	0.511	0.597
1ST QUARTILE :	21.4	12.8	4.71	0.0302	1.07	0.150	0.140
2ND QUARTILE :	39.6	13.6	4.90	0.0391	1.10	0.180	0.280
3RD QUARTILE :	61.3	19.6	5.53	0.0586	1.20	0.245	0.435
VOL. WGT. MEAN :	*****	15.3	*****	0.0446	1.13	0.197	0.331

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : PICKLE LAKE/CUMULATIVE PRECIP. #36

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	11.000	9.000	6.000	8.000	7.000	9.000	9.0000
MAXIMUM :	0.540	0.850	0.110	0.160	0.090	0.870	0.0880
MINIMUM :	0.005	0.080	0.010	0.005	0.030	0.050	0.0080
RANGE :	0.535	0.770	0.100	0.155	0.060	0.820	0.0800
ARITH. MEAN :	0.172	0.401	0.056	0.072	0.051	0.258	0.0350
ARITH. STD. DEV :	0.154	0.244	0.035	0.059	0.023	0.238	0.0235
GEOM. MEAN :	0.108	0.333	0.044	0.045	0.047	0.199	0.0284
GEOM. STD. DEV. :	1.237	0.694	0.846	1.198	0.427	0.742	0.7179
1ST QUARTILE :	0.060	0.250	0.020	0.020	0.030	0.152	0.0185
2ND QUARTILE :	0.105	0.305	0.055	0.060	0.040	0.182	0.0285
3RD QUARTILE :	0.265	0.425	0.067	0.125	0.065	0.231	0.0400
VOL. WGT. MEAN :	0.128	0.368	0.063	0.075	0.055	0.199	0.0317

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
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APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PICKLE LAKE/CUMULATIVE PRECIP. #36

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	MANGANESE	VICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	6.0000	6.0000	5.000	4.0000	6.0000	6.000	4.000
MAXIMUM :	0.0140	0.0005	0.011	0.1245	0.0070	0.001	0.124
MINIMUM :	0.0020	0.0005	0.004	0.0358	0.0005	0.001	0.010
RANGE :	0.0120	0.0000	0.007	0.0886	0.0065	0.000	0.115
ARITH. MEAN :	0.0055	0.0005	0.006	0.0666	0.0031	0.001	0.067
ARITH. STD. DEV :	0.0044	0.0000	0.003	0.0401	0.0022	0.000	0.053
GEOM. MEAN :	0.0045	0.0005	0.005	0.0591	0.0023	0.001	0.045
GEOM. STD. DEV. :	0.6664	0.0000	0.502	0.5453	0.8923	0.000	1.165
1ST QUARTILE :	0.0025	0.0005	0.004	0.0400	0.0012	0.001	0.023
2ND QUARTILE :	0.0040	0.0005	0.004	0.0531	0.0025	0.001	0.067
3RD QUARTILE :	0.0050	0.0005	0.006	0.0932	0.0035	0.001	0.111
VOL. WGT. MEAN :	0.0063	0.0005	0.006	0.0632	0.0028	0.001	0.064

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PICKLE LAKE/CUMULATIVE PRECIP. #36

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	5.0000	6.00000	7.0000
MAXIMUM :	0.0165	0.00030	0.0200
MINIMUM :	0.0022	0.00005	0.0004
RANGE :	0.0143	0.00025	0.0195
ARITH. MEAN :	0.0064	0.00015	0.0103
ARITH. STD. DEV :	0.0062	0.00010	0.0078
GEOM. MEAN :	0.0045	0.00012	0.0058
GEOM. STD. DEV. :	0.9000	0.76519	1.4679
1ST QUARTILE :	0.0023	0.00005	0.0009
2ND QUARTILE :	0.0025	0.00015	0.0089
3RD QUARTILE :	0.0053	0.00020	0.0162
VOL. WGT. MEAN :	0.0072	0.00016	0.0081

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PORT STANLEY/CUMULATIVE PRECIP. #03

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	10.0	9.00	10.0000	11.00	11.000	8.000
MAXIMUM :	121.0	62.5	4.35	0.1904	9.05	1.520	0.820
MINIMUM :	15.0	15.4	3.88	0.0346	2.00	0.330	0.250
RANGE :	106.0	47.1	0.47	0.1558	7.05	1.190	0.570
ARITH. MEAN :	64.2	41.3	4.10	0.1141	4.91	0.718	0.390
ARITH. STD. DEV :	36.9	13.6	0.16	0.0401	2.04	0.339	0.179
GEOM. MEAN :	53.5	38.8	4.10	0.1059	4.53	0.657	0.366
GEOM. STD. DEV. :	0.7	0.4	0.04	0.4501	0.43	0.435	0.354
1ST QUARTILE :	33.5	29.9	3.99	0.0921	3.10	0.440	0.305
2ND QUARTILE :	58.0	43.1	4.05	0.1170	4.60	0.610	0.345
3RD QUARTILE :	94.5	48.8	4.13	0.1294	5.95	0.825	0.375
VOL. WGT. MEAN :	*****	40.4	*****	0.1125	4.69	0.657	0.362

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : PORT STANLEY/CUMULATIVE PRECIP. #03

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	11.000	10.000	10.000	10.000	10.000	10.000	10.0000
MAXIMUM :	0.670	1.760	0.335	0.130	0.310	1.490	0.0520
MINIMUM :	0.070	0.310	0.020	0.010	0.010	0.168	0.0050
RANGE :	0.600	1.450	0.315	0.120	0.300	1.322	0.0470
ARITH. MEAN :	0.233	0.789	0.117	0.053	0.087	0.582	0.0205
ARITH. STD. DEV :	0.168	0.429	0.110	0.041	0.089	0.396	0.0149
GEOM. MEAN :	0.191	0.700	0.083	0.041	0.054	0.484	0.0158
GEOM. STD. DEV. :	0.642	0.513	0.868	0.773	1.090	0.635	0.7830
1ST QUARTILE :	0.110	0.435	0.052	0.025	0.020	0.291	0.0075
2ND QUARTILE :	0.175	0.725	0.062	0.040	0.080	0.505	0.0175
3RD QUARTILE :	0.275	0.835	0.120	0.055	0.105	0.600	0.0275
VOL. WGT. MEAN :	0.195	0.691	0.090	0.045	0.063	0.489	0.0202

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : PORT STANLEY/CUMULATIVE PRECIP. #03

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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		MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	9.0000	10.0000	9.000	7.0000	10.0000	10.000	8.000
MAXIMUM	:	0.0120	0.0030	0.042	0.1077	0.0220	0.001	0.493
MINIMUM	:	0.0020	0.0005	0.005	0.0322	0.0020	0.001	0.018
RANGE	:	0.0100	0.0025	0.037	0.0755	0.0200	0.000	0.475
ARITH. MEAN	:	0.0054	0.0007	0.014	0.0495	0.0093	0.001	0.104
ARITH. STD. DEV	:	0.0032	0.0008	0.012	0.0260	0.0050	0.000	0.158
GEOM. MEAN	:	0.0047	0.0006	0.011	0.0457	0.0081	0.001	0.059
GEOM. STD. DEV.	:	0.5706	0.5666	0.696	0.3939	0.5872	0.000	0.978
1ST QUARTILE	:	0.0030	0.0005	0.006	0.0349	0.0075	0.001	0.035
2ND QUARTILE	:	0.0040	0.0005	0.008	0.0406	0.0085	0.001	0.052
3RD QUARTILE	:	0.0060	0.0005	0.015	0.0441	0.0090	0.001	0.074
VOL. WGT. MEAN	:	0.0050	0.0006	0.011	0.0519	0.0082	0.001	0.061

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : PORT STANLEY/CUMULATIVE PRECIP. #03

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 4

		COPPER	CADMIUM	FREE H+ LAB MG/L
		MG/L	MG/L	
# OF SAMPLES	:	9.0000	10.00000	9.0000
MAXIMUM	:	0.0100	0.00060	0.1318
MINIMUM	:	0.0014	0.00005	0.0447
RANGE	:	0.0086	0.00055	0.0872
ARITH. MEAN	:	0.0043	0.00030	0.0839
ARITH. STD. DEV	:	0.0028	0.00021	0.0284
GEOM. MEAN	:	0.0037	0.00022	0.0792
GEOM. STD. DEV.	:	0.6004	0.95258	0.3689
1ST QUARTILE	:	0.0026	0.00008	0.0583
2ND QUARTILE	:	0.0031	0.00025	0.0785
3RD QUARTILE	:	0.0041	0.00045	0.1012
VOL. WGT. MEAN	:	0.0039	0.00027	0.0864

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : QUETICO CENTRE/CUMULATIVE PRECIP. #32

PERIOD OF REPORT : NOV 30,81 TO JAN 5,82

PAGE : 1

		PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
		MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
					MG/L		MG/L	
# OF SAMPLES	:	1.0	1.0	1.00	1.0000	1.00	1.000	1.000
MAXIMUM	:	23.7	14.9	4.54	0.0684	0.60	0.360	0.050
MINIMUM	:	23.7	14.9	4.54	0.0684	0.60	0.360	0.050
RANGE	:	0.0	0.0	0.00	0.0000	0.00	0.000	0.000
ARITH. MEAN	:	*****	*****	*****	*****	*****	*****	*****
ARITH. STD. DEV	:	*****	*****	*****	*****	*****	*****	*****
GEOM. MEAN	:	*****	*****	*****	*****	*****	*****	*****
GEOM. STD. DEV.	:	*****	*****	*****	*****	*****	*****	*****
1ST QUARTILE	:	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE	:	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE	:	*****	*****	*****	*****	*****	*****	*****
VOL. WGT. MEAN	:	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/CUMULATIVE PRECIP. #32

PERIOD OF REPORT : NOV 30,81 TO JAN 5,82

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	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	1.000	1.000	1.000	1.000	1.000	1.000	1.0000
MAXIMUM :	0.060	0.180	0.002	0.010	0.030	0.130	0.0010
MINIMUM :	0.060	0.180	0.002	0.010	0.030	0.130	0.0010
RANGE :	0.000	0.000	0.000	0.000	0.000	0.000	0.0000
ARITH. MEAN :	*****	*****	*****	*****	*****	*****	*****
ARITH. STD. DEV :	*****	*****	*****	*****	*****	*****	*****
GEOM. MEAN :	*****	*****	*****	*****	*****	*****	*****
GEOM. STD. DEV. :	*****	*****	*****	*****	*****	*****	*****
1ST QUARTILE :	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****	*****	*****	*****
VOL. WGT. MEAN :	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : QUETICO CENTRE/CUMULATIVE PRECIP. #32

PERIOD OF REPORT : NOV 30,81 TO JAN 5,82

PAGE : 3

		MANGANESE	VICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	1.0000	1.0000	1.000	1.0000	1.0000	1.000	1.000
MAXIMUM	:	0.0010	0.0005	0.002	0.0218	0.0010	0.001	0.013
MINIMUM	:	0.0010	0.0005	0.002	0.0218	0.0010	0.001	0.013
RANGE	:	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.000
ARITH. MEAN	:	*****	*****	*****	*****	*****	*****	*****
ARITH. STD. DEV	:	*****	*****	*****	*****	*****	*****	*****
GEOM. MEAN	:	*****	*****	*****	*****	*****	*****	*****
GEOM. STD. DEV.	:	*****	*****	*****	*****	*****	*****	*****
1ST QUARTILE	:	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE	:	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE	:	*****	*****	*****	*****	*****	*****	*****
VOL. WGT. MEAN	:	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : QUETICO CENTRE/CUMULATIVE PRECIP. #32

PERIOD OF REPORT : NOV 30,81 TO JAN 5,82

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		COPPER	CADMIUM	FREE H+
		MG/L	MG/L	LAB MG/L
# OF SAMPLES	:	1.0000	1.00000	1.0000
MAXIMUM	:	0.0027	0.00010	0.0288
MINIMUM	:	0.0027	0.00010	0.0288
RANGE	:	0.0000	0.00000	0.0000
ARITH. MEAN	:	*****	*****	*****
ARITH. STD. DEV	:	*****	*****	*****
GEOM. MEAN	:	*****	*****	*****
GEOM. STD. DEV.	:	*****	*****	*****
1ST QUARTILE	:	*****	*****	*****
2ND QUARTILE	:	*****	*****	*****
3RD QUARTILE	:	*****	*****	*****
VOL. WGT. MEAN	:	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : RAMSEY/CUMULATIVE PRECIP.

#26

PERIOD OF REPORT : DEC 30,80 TO JAN 6,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	JMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	11.0	11.00	11.0000	11.00	11.000	11.000
MAXIMUM :	123.0	38.3	5.12	0.1080	4.20	0.640	0.550
MINIMUM :	14.0	11.0	4.12	0.0344	0.95	0.100	0.060
RANGE :	109.0	27.3	1.00	0.0736	3.25	0.540	0.490
ARITH. MEAN :	62.7	23.8	4.39	0.0802	2.40	0.364	0.195
ARITH. STD. DEV :	35.6	8.4	0.28	0.0245	0.95	0.171	0.147
GEOM. MEAN :	52.0	22.3	4.39	0.0761	2.22	0.321	0.158
GEOM. STD. DEV. :	0.7	0.4	0.06	0.3609	0.42	0.567	0.661
1ST QUARTILE :	36.5	14.1	4.17	0.0553	1.57	0.205	0.080
2ND QUARTILE :	59.0	23.1	4.29	0.0797	2.02	0.325	0.160
3RD QUARTILE :	91.0	29.2	4.45	0.0991	2.97	0.485	0.195
VOL. WGT. MEAN :	*****	21.1	*****	0.0730	2.25	0.308	0.214

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : RAMSEY/CUMULATIVE PRECIP.

#26

PERIOD OF REPORT : DEC 30,80 TO JAN 6,82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	11.000	11.000	10.000	10.000	11.000	11.000	11.0000
MAXIMUM :	0.160	0.810	0.080	0.100	0.090	0.550	0.0520
MINIMUM :	0.020	0.080	0.002	0.020	0.020	0.006	0.0010
RANGE :	0.140	0.730	0.077	0.080	0.070	0.544	0.0510
ARITH. MEAN :	0.089	0.453	0.032	0.047	0.048	0.303	0.0165
ARITH. STD. DEV :	0.049	0.237	0.026	0.029	0.024	0.175	0.0156
GEOM. MEAN :	0.074	0.383	0.021	0.041	0.043	0.212	0.0092
GEOM. STD. DEV. :	0.699	0.674	1.108	0.516	0.499	1.260	1.2891
1ST QUARTILE :	0.035	0.260	0.008	0.030	0.025	0.175	0.0025
2ND QUARTILE :	0.090	0.360	0.030	0.040	0.045	0.229	0.0125
3RD QUARTILE :	0.125	0.650	0.032	0.040	0.050	0.447	0.0225
VOL. WGT. MEAN :	0.076	0.410	0.033	0.051	0.045	0.281	0.0163

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : RAMSEY/CUMULATIVE PRECIP.

#26

PERIOD OF REPORT : DEC 30,80 TO JAN 6,82

PAGE : 3

		MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINIUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	10.0000	10.0000	9.000	9.0000	10.0000	10.000	8.000
MAXIMUM	:	0.0140	0.0020	0.025	0.2297	0.0110	0.004	0.274
MINIMUM	:	0.0005	0.0005	0.004	0.0121	0.0020	0.001	0.005
RANGE	:	0.0135	0.0015	0.022	0.2176	0.0090	0.003	0.269
ARITH. MEAN	:	0.0040	0.0008	0.013	0.0658	0.0052	0.001	0.063
ARITH. STD. DEV	:	0.0039	0.0006	0.009	0.0665	0.0029	0.001	0.090
GEOM. MEAN	:	0.0028	0.0007	0.010	0.0457	0.0045	0.001	0.028
GEOM. STD. DEV.	:	0.9260	0.5891	0.787	0.8934	0.5844	0.438	1.376
1ST QUARTILE	:	0.0015	0.0005	0.005	0.0222	0.0025	0.001	0.009
2ND QUARTILE	:	0.0030	0.0005	0.011	0.0407	0.0050	0.001	0.025
3RD QUARTILE	:	0.0035	0.0007	0.016	0.0729	0.0065	0.001	0.079
VOL. WGT. MEAN	:	0.0045	0.0008	0.010	0.0692	0.0045	0.001	0.076

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : RAMSEY/CUMULATIVE PRECIP.

#26

PERIOD OF REPORT : DEC 30,80 TO JAN 6,82

PAGE : 4

	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	10.0000	10.00000	11.0000
MAXIMUM :	0.0066	0.00030	0.0759
MINIMUM :	0.0020	0.00005	0.0076
RANGE :	0.0046	0.00025	0.0683
ARITH. MEAN :	0.0036	0.00012	0.0466
ARITH. STD. DEV. :	0.0016	0.00009	0.0208
GEOM. MEAN :	0.0033	0.00009	0.0403
GEOM. STD. DEV. :	0.4238	0.77709	0.6559
1ST QUARTILE :	0.0022	0.00005	0.0278
2ND QUARTILE :	0.0032	0.00005	0.0433
3RD QUARTILE :	0.0039	0.00020	0.0604
VOL. WGT. MEAN :	0.0035	0.00010	0.0417

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SHALLOW LAKE/CUMULATIVE PRECIP. #09

PERIOD OF REPORT : DEC 30,80 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	11.0	10.00	10.0000	11.00	12.000	11.000
MAXIMUM :	115.0	59.9	4.56	0.1532	6.06	1.000	0.510
MINIMUM :	15.0	20.3	3.89	0.0528	1.95	0.350	0.080
RANGE :	100.0	39.6	0.67	0.1004	4.11	0.650	0.430
ARITH. MEAN :	66.9	32.2	4.24	0.0937	3.55	0.571	0.255
ARITH. STD. DEV :	30.6	10.7	0.17	0.0276	1.39	0.206	0.136
GEOM. MEAN :	57.8	30.9	4.23	0.0902	3.32	0.540	0.225
GEOM. STD. DEV. :	0.6	0.3	0.04	0.2919	0.38	0.340	0.521
1ST QUARTILE :	48.5	24.6	4.15	0.0735	2.39	0.425	0.170
2ND QUARTILE :	71.5	29.1	4.23	0.0931	3.07	0.495	0.205
3RD QUARTILE :	87.5	36.1	4.31	0.1052	4.00	0.695	0.280
VOL. WGT. MEAN :	*****	31.9	*****	0.0947	3.46	0.556	0.247

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : SHALLOW LAKE/CUMULATIVE PRECIP.

#09

PERIOD OF REPORT : DEC 30.80 TO JAN 5.82

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	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	11.000	10.000	11.000	10.000	11.000	11.000	10.0000
MAXIMUM :	0.400	1.000	0.115	0.100	0.200	0.820	0.0480
MINIMUM :	0.020	0.380	0.015	0.010	0.010	0.284	0.0005
RANGE :	0.380	0.620	0.100	0.090	0.190	0.536	0.0475
ARITH. MEAN :	0.163	0.556	0.057	0.039	0.071	0.438	0.0174
ARITH. STD. DEV :	0.114	0.200	0.035	0.026	0.063	0.154	0.0147
GEOM. MEAN :	0.126	0.528	0.046	0.032	0.048	0.417	0.0113
GEOM. STD. DEV. :	0.828	0.330	0.743	0.664	0.970	0.318	1.2412
1ST QUARTILE :	0.070	0.380	0.017	0.020	0.020	0.301	0.0095
2ND QUARTILE :	0.135	0.490	0.050	0.035	0.045	0.415	0.0115
3RD QUARTILE :	0.195	0.670	0.085	0.050	0.100	0.490	0.0175
VOL. WGT. MEAN :	0.139	0.564	0.051	0.037	0.058	0.437	0.0189

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SHALLOW LAKE/CUMULATIVE PRECIP. #09

PERIOD OF REPORT : DEC 30,80 TO JAN 5,82

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	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	10.0000	10.0000	9.000	9.0000	10.0000	11.000	9.000
MAXIMUM :	0.0070	0.0020	0.023	0.1410	0.0180	0.001	0.096
MINIMUM :	0.0010	0.0005	0.005	0.0076	0.0005	0.001	0.004
RANGE :	0.0060	0.0015	0.019	0.1334	0.0175	0.000	0.092
ARITH. MEAN :	0.0031	0.0007	0.010	0.0495	0.0072	0.001	0.036
ARITH. STD. DEV :	0.0019	0.0005	0.007	0.0422	0.0050	0.000	0.029
GEOM. MEAN :	0.0027	0.0006	0.008	0.0354	0.0054	0.001	0.026
GEOM. STD. DEV. :	0.5700	0.4678	0.648	0.9122	0.9772	0.000	0.943
1ST QUARTILE :	0.0020	0.0005	0.005	0.0167	0.0040	0.001	0.016
2ND QUARTILE :	0.0025	0.0005	0.006	0.0336	0.0065	0.001	0.022
3RD QUARTILE :	0.0030	0.0005	0.011	0.0565	0.0085	0.001	0.044
VOL. WGT. MEAN :	0.0029	0.0007	0.010	0.0468	0.0075	0.001	0.034

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : SHALLOW LAKE/CUMULATIVE PRECIP. #09

PERIOD OF REPORT : DEC 30,80 TO JAN 5,82

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		COPPER	CADMIUM	FREE H+
		MG/L	MG/L	LAB MG/L
# OF SAMPLES	:	9.0000	10.00000	10.0000
MAXIMUM	:	0.0104	0.00100	0.1288
MINIMUM	:	0.0013	0.00005	0.0275
RANGE	:	0.0092	0.00095	0.1013
ARITH. MEAN	:	0.0044	0.00026	0.0625
ARITH. STD. DEV	:	0.0034	0.00029	0.0269
GEOM. MEAN	:	0.0034	0.00018	0.0581
GEOM. STD. DEV.	:	0.7921	0.89812	0.3969
1ST QUARTILE	:	0.0014	0.00010	0.0468
2ND QUARTILE	:	0.0035	0.00015	0.0590
3RD QUARTILE	:	0.0046	0.00030	0.0684
VOL. WGT. MEAN	:	0.0039	0.00027	0.0623

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SMITH'S FALLS/CUMULATIVE PRECIP. #15

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	10.0	9.00	10.0000	12.00	12.000	9.000
MAXIMUM :	189.5	51.0	5.09	0.1220	5.35	1.390	0.980
MINIMUM :	12.1	13.9	3.98	0.0320	1.50	0.360	0.190
RANGE :	177.4	37.1	1.11	0.0900	3.85	1.030	0.790
ARITH. MEAN :	84.2	26.8	4.42	0.0697	3.48	0.614	0.647
ARITH. STD. DEV :	50.7	11.0	0.34	0.0288	1.39	0.320	0.300
GEOM. MEAN :	66.9	24.9	4.41	0.0644	3.20	0.556	0.569
GEOM. STD. DEV. :	0.8	0.4	0.08	0.4250	0.45	0.443	0.580
1ST QUARTILE :	43.9	16.8	4.18	0.0438	2.25	0.385	0.345
2ND QUARTILE :	90.1	27.6	4.31	0.0623	3.65	0.475	0.650
3RD QUARTILE :	117.9	30.3	4.55	0.0899	4.77	0.750	0.840
VOL. WGT. MEAN :	*****	25.0	*****	0.0659	3.43	0.487	0.587

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SMITH'S FALLS/CUMULATIVE PRECIP. #15

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	12.000	11.000	3.000	12.000	12.000	12.000	10.0000
MAXIMUM :	0.740	1.250	0.260	0.170	0.540	0.020	0.1120
MINIMUM :	0.080	0.230	0.110	0.010	0.020	0.132	0.0030
RANGE :	0.660	1.020	0.150	0.160	0.520	0.688	0.1090
ARITH. MEAN :	0.257	0.639	0.162	0.063	0.155	0.386	0.0276
ARITH. STD. DEV. :	0.202	0.346	0.085	0.039	0.157	0.195	0.0312
GEOM. MEAN :	0.203	0.556	0.149	0.053	0.097	0.339	0.0180
GEOM. STD. DEV. :	0.702	0.565	0.484	0.668	1.049	0.559	0.9901
1ST QUARTILE :	0.135	0.315	*****	0.040	0.055	0.227	0.0080
2ND QUARTILE :	0.165	0.550	*****	0.055	0.090	0.398	0.0205
3RD QUARTILE :	0.350	0.855	*****	0.070	0.230	0.475	0.0275
VOL. WGT. MEAN :	0.178	0.690	0.126	0.056	0.094	0.389	0.0386

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SMITH'S FALLS/CUMULATIVE PRECIP. #15

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 3

		MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	10.0000	10.0000	9.000	8.0000	10.0000	10.000	8.000
MAXIMUM	:	0.0110	0.0030	0.023	0.1438	0.0130	0.001	0.166
MINIMUM	:	0.0010	0.0005	0.005	0.0168	0.0040	0.001	0.009
RANGE	:	0.0100	0.0025	0.018	0.1269	0.0090	0.000	0.157
ARITH. MEAN	:	0.0056	0.0007	0.011	0.0554	0.0084	0.001	0.047
ARITH. STD. DEV	:	0.0029	0.0008	0.006	0.0419	0.0028	0.000	0.051
GEOM. MEAN	:	0.0048	0.0006	0.010	0.0438	0.0080	0.001	0.031
GEOM. STD. DEV.	:	0.6715	0.5666	0.533	0.7311	0.3496	0.000	0.943
1ST QUARTILE	:	0.0035	0.0005	0.006	0.0230	0.0065	0.001	0.014
2ND QUARTILE	:	0.0055	0.0005	0.009	0.0470	0.0080	0.001	0.032
3RD QUARTILE	:	0.0070	0.0005	0.014	0.0712	0.0095	0.001	0.055
VOL. WGT. MEAN	:	0.0052	0.0008	0.009	0.0537	0.0078	0.001	0.045

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SMITH'S FALLS/CUMULATIVE PRECIP. #15

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 4

	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	8.0000	10.00000	9.0000
MAXIMUM :	0.0085	0.00050	0.1047
MINIMUM :	0.0009	0.00005	0.0081
RANGE :	0.0076	0.00045	0.0966
ARITH. MEAN :	0.0045	0.00016	0.0473
ARITH. STD. DEV :	0.0030	0.00018	0.0300
GEOM. MEAN :	0.0034	0.00010	0.0377
GEOM. STD. DEV. :	0.8798	0.88710	0.7814
1ST QUARTILE :	0.0015	0.00005	0.0211
2ND QUARTILE :	0.0046	0.00010	0.0435
3RD QUARTILE :	0.0070	0.00010	0.0538
VOL. WGT. MEAN :	0.0045	0.00012	0.0366

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : UXBRIDGE/CUMULATIVE PRECIP.

#11

PERIOD OF REPORT : DEC 31,80 TO JAN 4,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	10.0	10.00	10.0000	12.00	12.000	7.000
MAXIMUM :	122.4	63.0	5.24	0.1568	6.50	1.040	0.860
MINIMUM :	21.7	19.4	3.90	0.0366	2.00	0.300	0.220
RANGE :	100.7	43.6	1.34	0.1202	4.50	0.740	0.640
ARITH. MEAN :	74.6	33.5	4.39	0.0846	4.23	0.633	0.491
ARITH. STD. DEV :	33.2	13.9	0.41	0.0418	1.64	0.212	0.224
GEOM. MEAN :	66.6	31.3	4.37	0.0753	3.92	0.599	0.447
GEOM. STD. DEV. :	0.5	0.4	0.09	0.5185	0.42	0.359	0.476
1ST QUARTILE :	49.7	22.8	4.02	0.0449	2.57	0.465	0.265
2ND QUARTILE :	71.5	27.8	4.29	0.0823	4.40	0.630	0.405
3RD QUARTILE :	105.1	38.8	4.52	0.1060	5.82	0.770	0.620
VOL. WGT. MEAN :	*****	36.3	*****	0.0928	4.29	0.590	0.504

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : UXBRIDGE/CUMULATIVE PRECIP.

#11

PERIOD OF REPORT : DEC 31,80 TO JAN 4,82

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	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	11.000	10.000	10.000	10.000	10.000	12.000	10.0000
MAXIMUM :	0.840	1.600	0.200	0.140	0.560	0.980	0.1040
MINIMUM :	0.060	0.300	0.002	0.010	0.000	0.230	0.0020
RANGE :	0.780	1.300	0.197	0.130	0.560	0.750	0.1020
ARITH. MEAN :	0.262	0.773	0.076	0.040	0.107	0.551	0.0191
ARITH. STD. DEV. :	0.227	0.388	0.059	0.038	0.169	0.249	0.0302
GEOM. MEAN :	0.197	0.692	0.051	0.031	0.069	0.497	0.0106
GEOM. STD. DEV. :	0.776	0.502	1.193	0.717	1.349	0.487	1.0216
1ST QUARTILE :	0.095	0.450	0.042	0.020	0.010	0.366	0.0055
2ND QUARTILE :	0.165	0.700	0.055	0.030	0.035	0.500	0.0120
3RD QUARTILE :	0.285	0.920	0.087	0.035	0.115	0.720	0.0135
VOL. WGT. MEAN :	0.226	0.759	0.072	0.041	0.067	0.520	0.0200

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : UXBRIDGE/CUMULATIVE PRECIP.

#11

PERIOD OF REPORT : DEC 31,80 TO JAN 4,82

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	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	9.0000	9.0000	7.000	8.0000	9.0000	9.000	8.000
MAXIMUM :	0.0120	0.0010	0.022	0.1554	0.0150	0.001	0.145
MINIMUM :	0.0010	0.0005	0.005	0.0189	0.0030	0.001	0.009
RANGE :	0.0110	0.0005	0.017	0.1365	0.0120	0.000	0.136
ARITH. MEAN :	0.0052	0.0006	0.011	0.0666	0.0083	0.001	0.055
ARITH. STD. DEV. :	0.0037	0.0002	0.006	0.0486	0.0040	0.000	0.047
GEOM. MEAN :	0.0041	0.0005	0.009	0.0534	0.0074	0.001	0.038
GEOM. STD. DEV. :	0.7778	0.2310	0.503	0.7087	0.5217	0.000	0.984
1ST QUARTILE :	0.0025	0.0005	0.006	0.0329	0.0050	0.001	0.018
2ND QUARTILE :	0.0040	0.0005	0.008	0.0512	0.0070	0.001	0.044
3RD QUARTILE :	0.0055	0.0005	0.012	0.0951	0.0105	0.001	0.082
VOL. WGT. MEAN :	0.0046	0.0006	0.009	0.0614	0.0082	0.001	0.048

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : UXBRIDGE/CUMULATIVE PRECIP. #11

PERIOD OF REPORT : DEC 31,80 TO JAN 4,82

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		COPPER	CADMIUM	FREE H+ LAB MG/L
		MG/L	MG/L	
# OF SAMPLES	:	7.0000	9.00000	10.0000
MAXIMUM	:	0.0208	0.00080	0.1259
MINIMUM	:	0.0008	0.00005	0.0058
RANGE	:	0.0200	0.00075	0.1201
ARITH. MEAN	:	0.0054	0.00026	0.0558
ARITH. STD. DEV	:	0.0069	0.00027	0.0388
GEOM. MEAN	:	0.0034	0.00015	0.0411
GEOM. STD. DEV.	:	0.9780	1.12901	0.9380
1ST QUARTILE	:	0.0016	0.00005	0.0199
2ND QUARTILE	:	0.0027	0.00012	0.0513
3RD QUARTILE	:	0.0043	0.00025	0.0717
VOL. WGT. MEAN	:	0.0048	0.00023	0.0656

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : WATERLOO/CUMULATIVE PRECIP.

#07

PERIOD OF REPORT : DEC 31,81 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	JMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	11.0	8.00	10.0000	10.00	10.000	9.000
MAXIMUM :	99.0	74.0	4.88	0.1624	8.50	1.070	0.980
MINIMUM :	27.1	16.6	3.85	0.0308	2.40	0.400	0.120
RANGE :	71.9	57.4	1.03	0.1316	6.10	0.670	0.860
ARITH. MEAN :	59.5	37.2	4.21	0.0863	4.07	0.669	0.562
ARITH. STD. DEV :	19.6	19.3	0.31	0.0439	1.86	0.216	0.318
GEOM. MEAN :	56.3	33.2	4.20	0.0760	3.78	0.640	0.467
GEOM. STD. DEV. :	0.4	0.5	0.07	0.5481	0.39	0.311	0.702
1ST QUARTILE :	47.5	21.1	3.99	0.0450	2.80	0.485	0.300
2ND QUARTILE :	58.5	30.5	4.20	0.0906	3.47	0.645	0.415
3RD QUARTILE :	73.2	48.0	4.27	0.0986	4.17	0.695	0.805
VOL. WGT. MEAN :	*****	36.2	*****	0.0803	3.82	0.634	0.558

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WATERLOO/CUMULATIVE PRECIP.

#07

PERIOD OF REPORT : DEC 31,81 TO JAN 5,82

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	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	10.000	9.000	8.000	10.000	9.000	9.000	9.0000
MAXIMUM :	0.790	1.400	0.360	0.440	0.460	1.110	0.2220
MINIMUM :	0.110	0.420	0.015	0.010	0.020	0.300	0.0040
RANGE :	0.680	0.980	0.345	0.430	0.440	0.810	0.2180
ARITH. MEAN :	0.261	0.823	0.162	0.089	0.118	0.650	0.0391
ARITH. STD. DEV. :	0.197	0.268	0.130	0.128	0.135	0.234	0.0693
GEOM. MEAN :	0.221	0.787	0.111	0.051	0.077	0.614	0.0183
GEOM. STD. DEV. :	0.556	0.322	1.056	1.032	0.962	0.366	1.1387
1ST QUARTILE :	0.150	0.710	0.067	0.025	0.045	0.530	0.0090
2ND QUARTILE :	0.185	0.750	0.110	0.045	0.080	0.595	0.0135
3RD QUARTILE :	0.280	0.825	0.285	0.065	0.085	0.640	0.0215
VOL. WGT. MEAN :	0.229	0.778	0.154	0.100	0.094	0.613	0.0324

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WATERLOO/CUMULATIVE PRECIP.

#07

PERIOD OF REPORT : DEC 31,81 TO JAN 5,82

PAGE : 3

	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	10.0000	10.0000	8.000	8.0000	10.0000	10.000	8.000
MAXIMUM :	0.0160	0.0030	0.038	0.1488	0.0230	0.001	0.187
MINIMUM :	0.0020	0.0005	0.003	0.0542	0.0030	0.001	0.013
RANGE :	0.0140	0.0025	0.035	0.0946	0.0200	0.000	0.174
ARITH. MEAN :	0.0063	0.0008	0.013	0.0848	0.0096	0.001	0.070
ARITH. STD. DEV :	0.0039	0.0008	0.011	0.0362	0.0056	0.000	0.053
GEOM. MEAN :	0.0054	0.0006	0.010	0.0791	0.0082	0.001	0.054
GEOM. STD. DEV. :	0.5690	0.5844	0.777	0.3831	0.5953	0.000	0.838
1ST QUARTILE :	0.0035	0.0005	0.006	0.0601	0.0045	0.001	0.039
2ND QUARTILE :	0.0055	0.0005	0.010	0.0679	0.0100	0.001	0.065
3RD QUARTILE :	0.0070	0.0005	0.016	0.1096	0.0110	0.001	0.076
VOL. WGT. MEAN :	0.0065	0.0008	0.013	0.0812	0.0091	0.001	0.062

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WATERLOO/CUMULATIVE PRECIP.

#07

PERIOD OF REPORT : DEC 31,81 TO JAN 5,82

PAGE : 4

		COPPER	CADMIUM	FREE H+
		MG/L	MG/L	LAB MG/L
# OF SAMPLES	:	9.0000	10.00000	8.0000
MAXIMUM	:	0.0111	0.00200	0.1413
MINIMUM	:	0.0010	0.00005	0.0132
RANGE	:	0.0101	0.00195	0.1281
ARITH. MEAN	:	0.0051	0.00035	0.0740
ARITH. STD. DEV	:	0.0034	0.00059	0.0396
GEOM. MEAN	:	0.0041	0.00018	0.0620
GEOM. STD. DEV.	:	0.7799	1.07113	0.7208
1ST QUARTILE	:	0.0024	0.00008	0.0539
2ND QUARTILE	:	0.0039	0.00020	0.0624
3RD QUARTILE	:	0.0060	0.00025	0.1024
VOL. WGT. MEAN	:	0.0055	0.00031	0.0781

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : WHITNEY/CUMULATIVE PRECIP.

#19

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 1

		PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
		MM	JMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
					MG/L		MG/L	
# OF SAMPLES	:	12.0	12.0	11.00	12.0000	12.00	12.000	12.000
MAXIMUM	:	190.0	44.8	4.65	0.1342	4.50	0.900	0.820
MINIMUM	:	23.0	10.6	3.98	0.0580	0.65	0.180	0.020
RANGE	:	167.0	34.2	0.67	0.0762	3.85	0.720	0.800
ARITH. MEAN	:	84.6	26.5	4.32	0.0847	2.61	0.410	0.166
ARITH. STD. DEV	:	45.2	10.2	0.21	0.0244	1.30	0.189	0.218
GEOM. MEAN	:	74.7	24.5	4.31	0.0817	2.25	0.378	0.102
GEOM. STD. DEV.	:	0.5	0.4	0.05	0.2764	0.61	0.412	0.968
1ST QUARTILE	:	60.0	20.3	4.10	0.0640	1.57	0.310	0.060
2ND QUARTILE	:	72.5	26.9	4.30	0.0824	2.68	0.360	0.085
3RD QUARTILE	:	93.5	33.5	4.44	0.0958	3.90	0.450	0.185
VOL. WGT. MEAN	:	*****	28.1	*****	0.0875	2.85	0.375	0.145

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WHITNEY/CUMULATIVE PRECIP.

#19

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	12.000	11.000	12.000	12.000	11.000	11.000	10.0000
MAXIMUM :	0.200	1.090	0.125	0.360	0.120	0.730	0.0580
MINIMUM :	0.040	0.130	0.002	0.005	0.005	0.102	0.0020
RANGE :	0.160	0.960	0.123	0.355	0.115	0.628	0.0560
ARITH. MEAN :	0.108	0.467	0.023	0.058	0.042	0.296	0.0157
ARITH. STD. DEV. :	0.054	0.276	0.034	0.102	0.032	0.195	0.0173
GEOM. MEAN :	0.095	0.396	0.011	0.024	0.031	0.244	0.0097
GEOM. STD. DEV. :	0.562	0.625	1.260	1.243	0.901	0.653	1.0391
1ST QUARTILE :	0.060	0.230	0.004	0.010	0.015	0.121	0.0040
2ND QUARTILE :	0.100	0.385	0.010	0.020	0.040	0.218	0.0085
3RD QUARTILE :	0.155	0.560	0.027	0.050	0.055	0.380	0.0165
VOL. WGT. MEAN :	0.100	0.462	0.020	0.057	0.035	0.309	0.0207

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WHITNEY/CUMULATIVE PRECIP.

#19

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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		MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINIUM
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES	:	10.0000	10.0000	9.000	9.0000	10.0000	10.000	8.000
MAXIMUM	:	0.0120	0.0040	0.023	0.3012	0.0090	0.001	0.346
MINIMUM	:	0.0005	0.0005	0.002	0.0109	0.0020	0.001	0.006
RANGE	:	0.0115	0.0035	0.021	0.2903	0.0070	0.000	0.341
ARITH. MEAN	:	0.0027	0.0008	0.007	0.0731	0.0048	0.001	0.055
ARITH. STD. DEV	:	0.0034	0.0011	0.006	0.1077	0.0026	0.000	0.118
GEOM. MEAN	:	0.0018	0.0006	0.006	0.0336	0.0042	0.001	0.018
GEOM. STD. DEV.	:	0.8793	0.6576	0.674	1.1989	0.5632	0.000	1.323
1ST QUARTILE	:	0.0010	0.0005	0.004	0.0149	0.0025	0.001	0.007
2ND QUARTILE	:	0.0020	0.0005	0.006	0.0217	0.0040	0.001	0.013
3RD QUARTILE	:	0.0020	0.0005	0.007	0.0277	0.0065	0.001	0.024
VOL. WGT. MEAN	:	0.0025	0.0007	0.008	0.0633	0.0052	0.001	0.041

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WHITNEY/CUMULATIVE PRECIP.

#19

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 4

	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	9.0000	10.00000	11.0000
MAXIMUM :	0.0255	0.00090	0.1047
MINIMUM :	0.0008	0.00005	0.0224
RANGE :	0.0247	0.00085	0.0823
ARITH. MEAN :	0.0059	0.00019	0.0536
ARITH. STD. DEV :	0.0081	0.00026	0.0253
GEOM. MEAN :	0.0031	0.00011	0.0484
GEOM. STD. DEV. :	1.1273	1.01379	0.4847
1ST QUARTILE :	0.0014	0.00005	0.0275
2ND QUARTILE :	0.0021	0.00008	0.0468
3RD QUARTILE :	0.0040	0.00020	0.0658
VOL. WGT. MEAN :	0.0046	0.00016	0.0576

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WILBERFORCE/CUMULATIVE PRECIP. #18

PERIOD OF REPORT : DEC 31,80 TO DEC 31,81

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	10.0	10.00	9.0000	11.00	11.000	11.000
MAXIMUM :	159.0	59.0	4.56	0.1584	6.05	1.110	0.490
MINIMUM :	15.0	15.8	3.89	0.0336	1.25	0.270	0.100
RANGE :	144.0	43.2	0.67	0.1248	4.80	0.840	0.390
ARITH. MEAN :	76.2	35.7	4.19	0.0988	3.49	0.542	0.208
ARITH. STD. DEV :	37.8	13.3	0.19	0.0372	1.46	0.229	0.121
GEOM. MEAN :	66.2	33.3	4.18	0.0911	3.19	0.504	0.182
GEOM. STD. DEV. :	0.6	0.4	0.05	0.4645	0.46	0.396	0.530
1ST QUARTILE :	53.0	22.7	4.03	0.0718	2.20	0.335	0.100
2ND QUARTILE :	78.5	34.8	4.16	0.0974	3.10	0.515	0.170
3RD QUARTILE :	91.0	44.3	4.28	0.1153	4.47	0.580	0.265
VOL. WGT. MEAN :	*****	34.6	*****	0.1019	3.67	0.499	0.205

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WILBERFORCE/CUMULATIVE PRECIP.

#18

PERIOD OF REPORT : DEC 31,80 TO DEC 31,81

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	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	11.000	8.000	11.000	11.000	11.000	10.000	8.0000
MAXIMUM :	0.370	1.070	0.080	0.340	0.210	0.760	0.0570
MINIMUM :	0.040	0.180	0.002	0.010	0.020	0.158	0.0050
RANGE :	0.330	0.890	0.077	0.330	0.190	0.602	0.0520
ARITH. MEAN :	0.155	0.622	0.028	0.086	0.066	0.420	0.0149
ARITH. STD. DEV :	0.090	0.302	0.024	0.128	0.058	0.210	0.0172
GEOM. MEAN :	0.134	0.550	0.018	0.033	0.050	0.370	0.0107
GEOM. STD. DEV. :	0.582	0.571	1.168	1.380	0.771	0.551	0.7502
1ST QUARTILE :	0.090	0.445	0.006	0.010	0.025	0.209	0.0065
2ND QUARTILE :	0.140	0.525	0.020	0.020	0.035	0.376	0.0100
3RD QUARTILE :	0.160	0.895	0.042	0.085	0.085	0.520	0.0120
VOL. WGT. MEAN :	0.136	0.656	0.030	0.126	0.053	0.445	0.0156

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILBERFORCE/CUMULATIVE PRECIP. #18

PERIOD OF REPORT : DEC 31,80 TO DEC 31,81

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	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	8.0000	8.0000	6.000	7.0000	8.0000	8.000	7.000
MAXIMUM :	0.0100	0.0020	0.022	0.1702	0.0270	0.001	0.076
MINIMUM :	0.0010	0.0005	0.004	0.0146	0.0020	0.001	0.006
RANGE :	0.0090	0.0015	0.018	0.1556	0.0250	0.000	0.071
ARITH. MEAN :	0.0037	0.0009	0.009	0.0562	0.0102	0.001	0.030
ARITH. STD. DEV. :	0.0028	0.0007	0.007	0.0539	0.0076	0.000	0.027
GEOM. MEAN :	0.0030	0.0008	0.008	0.0408	0.0081	0.001	0.020
GEOM. STD. DEV. :	0.6895	0.6350	0.618	0.8406	0.7741	0.000	1.003
1ST QUARTILE :	0.0020	0.0005	0.004	0.0177	0.0060	0.001	0.006
2ND QUARTILE :	0.0030	0.0005	0.007	0.0323	0.0090	0.001	0.014
3RD QUARTILE :	0.0045	0.0015	0.009	0.0618	0.0115	0.001	0.045
VOL. WGT. MEAN :	0.0039	0.0011	0.009	0.0547	0.0108	0.001	0.027

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WILBERFORCE/CUMULATIVE PRECIP. #18

PERIOD OF REPORT : DEC 31,80 TO DEC 31,81

PAGE : 4

	COPPER	CADMIUM	FREE H+ LAB MG/L
	MG/L	MG/L	MG/L
# OF SAMPLES :	7.0000	8.00000	10.0000
MAXIMUM :	0.0118	0.01400	0.1288
MINIMUM :	0.0010	0.00010	0.0275
RANGE :	0.0109	0.01390	0.1013
ARITH. MEAN :	0.0044	0.00191	0.0704
ARITH. STD. DEV. :	0.0040	0.00488	0.0295
GEOM. MEAN :	0.0031	0.00029	0.0647
GEOM. STD. DEV. :	0.8864	1.63488	0.4479
1ST QUARTILE :	0.0012	0.00010	0.0465
2ND QUARTILE :	0.0026	0.00020	0.0684
3RD QUARTILE :	0.0057	0.00030	0.0862
VOL. WGT. MEAN :	0.0051	0.00187	0.0669

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WILKESPORT/CUMULATIVE PRECIP. #04

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	12.0	10.0	9.00	10.0000	12.00	11.000	5.000
MAXIMUM :	142.0	62.0	5.03	0.1406	9.80	1.220	1.100
MINIMUM :	15.0	12.8	3.87	0.0492	1.95	0.360	0.190
RANGE :	127.0	49.2	1.16	0.0914	7.85	0.860	0.910
ARITH. MEAN :	60.0	38.6	4.33	0.0910	6.09	0.781	0.666
ARITH. STD. DEV :	37.0	15.9	0.39	0.0325	2.47	0.280	0.335
GEOM. MEAN :	49.8	35.2	4.31	0.0856	5.54	0.732	0.576
GEOM. STD. DEV. :	0.7	0.5	0.09	0.3742	0.49	0.388	0.671
1ST QUARTILE :	34.5	27.5	4.00	0.0597	4.22	0.490	0.365
2ND QUARTILE :	52.5	33.4	4.17	0.0892	6.50	0.760	0.620
3RD QUARTILE :	81.5	51.1	4.43	0.1090	7.88	0.945	0.750
VOL. WGT. MEAN :	*****	36.1	*****	0.0868	5.25	0.686	0.602

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WILKESPORT/CUMULATIVE PRECIP.

#04

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	10.000	9.000	8.000	9.000	9.000	9.000	9.0000
MAXIMUM :	0.710	1.500	0.180	0.150	0.170	1.320	0.0980
MINIMUM :	0.130	0.400	0.025	0.010	0.020	0.286	0.0030
RANGE :	0.580	1.100	0.155	0.140	0.150	1.034	0.0950
ARITH. MEAN :	0.342	0.983	0.105	0.073	0.086	0.800	0.0391
ARITH. STD. DEV :	0.172	0.419	0.055	0.044	0.053	0.359	0.0302
GEOM. MEAN :	0.307	0.890	0.088	0.059	0.068	0.714	0.0260
GEOM. STD. DEV. :	0.489	0.501	0.695	0.781	0.794	0.544	1.1189
1ST QUARTILE :	0.220	0.580	0.060	0.050	0.035	0.473	0.0110
2ND QUARTILE :	0.305	0.930	0.113	0.060	0.070	0.760	0.0330
3RD QUARTILE :	0.385	1.255	0.145	0.070	0.120	0.980	0.0515
VOL. WGT. MEAN :	0.275	0.876	0.095	0.066	0.077	0.729	0.0382

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WILKESPORT/CUMULATIVE PRECIP.

#04

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINIUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	10.0000	10.0000	9.000	8.0000	10.0000	10.000	8.000
MAXIMUM :	0.0090	0.0010	0.044	0.1817	0.0160	0.001	0.165
MINIMUM :	0.0030	0.0005	0.002	0.0314	0.0070	0.001	0.019
RANGE :	0.0060	0.0005	0.043	0.1503	0.0090	0.000	0.146
ARITH. MEAN :	0.0062	0.0005	0.014	0.0763	0.0106	0.001	0.068
ARITH. STD. DEV :	0.0023	0.0002	0.013	0.0525	0.0028	0.000	0.049
GEOM. MEAN :	0.0058	0.0005	0.010	0.0634	0.0103	0.001	0.055
GEOM. STD. DEV. :	0.4094	0.2192	0.907	0.6360	0.2579	0.000	0.732
1ST QUARTILE :	0.0040	0.0005	0.007	0.0382	0.0085	0.001	0.031
2ND QUARTILE :	0.0060	0.0005	0.009	0.0537	0.0100	0.001	0.055
3RD QUARTILE :	0.0080	0.0005	0.013	0.1068	0.0110	0.001	0.096
VOL. WGT. MEAN :	0.0058	0.0006	0.012	0.0670	0.0101	0.001	0.058

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : WILKESPORT/CUMULATIVE PRECIP. #04

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	9.0000	10.00000	9.0000
MAXIMUM :	0.0136	0.00120	0.1349
MINIMUM :	0.0013	0.00005	0.0093
RANGE :	0.0123	0.00115	0.1256
ARITH. MEAN :	0.0042	0.00031	0.0628
ARITH. STD. DEV :	0.0042	0.00035	0.0424
GEOM. MEAN :	0.0030	0.00020	0.0471
GEOM. STD. DEV. :	0.8369	0.94890	0.8975
1ST QUARTILE :	0.0014	0.00010	0.0255
2ND QUARTILE :	0.0022	0.00020	0.0513
3RD QUARTILE :	0.0036	0.00030	0.0813
VOL. WGT. MEAN :	0.0043	0.00031	0.0546

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

**PART VI**

**SUMMARY STATISTICS OF OBSERVED CONCENTRATION BY REGION**

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CENTRAL REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	JMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	64.0	54.0	53.00	55.0000	60.00	61.000	51.000
MAXIMUM :	185.0	72.5	5.24	0.1604	7.45	1.280	1.220
MINIMUM :	4.0	15.8	3.86	0.0286	0.50	0.210	0.050
RANGE :	181.0	56.7	1.38	0.1318	6.95	1.070	1.170
ARITH. MEAN :	73.9	34.8	4.28	0.0883	3.83	0.589	0.351
ARITH. STD. DEV :	35.7	13.2	0.28	0.0359	1.69	0.230	0.251
GEOM. MEAN :	63.5	32.6	4.27	0.0803	3.38	0.546	0.275
GEOM. STD. DEV. :	0.6	0.4	0.06	0.4640	0.55	0.395	0.722
1ST QUARTILE :	52.0	24.3	4.09	0.0628	2.52	0.430	0.160
2ND QUARTILE :	72.2	32.7	4.26	0.0879	3.85	0.555	0.275
3RD QUARTILE :	98.5	43.4	4.39	0.1119	5.05	0.705	0.470
VOL. WGT. MEAN :	*****	35.3	*****	0.0930	3.85	0.541	0.331

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CENTRAL REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	54.000	51.000	51.000	54.000	57.000	59.000	52.0000
MAXIMUM :	0.840	1.600	0.210	0.410	0.560	1.410	0.1040
MINIMUM :	0.040	0.180	0.002	0.010	0.000	0.132	0.0005
RANGE :	0.800	1.420	0.207	0.400	0.560	1.278	0.1035
ARITH. MEAN :	0.218	0.668	0.051	0.058	0.098	0.501	0.0184
ARITH. STD. DEV :	0.170	0.368	0.050	0.081	0.121	0.290	0.0225
GEOM. MEAN :	0.172	0.574	0.029	0.034	0.064	0.421	0.0103
GEOM. STD. DEV. :	0.685	0.570	1.229	0.955	0.966	0.610	1.1500
1ST QUARTILE :	0.120	0.385	0.015	0.020	0.030	0.261	0.0050
2ND QUARTILE :	0.160	0.575	0.042	0.030	0.055	0.420	0.0115
3RD QUARTILE :	0.265	0.845	0.062	0.055	0.115	0.675	0.0205
VOL. WGT. MEAN :	0.188	0.647	0.049	0.063	0.080	0.493	0.0196

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CENTRAL REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	48.0000	51.0000	41.000	42.0000	50.0000	51.000	42.000
MAXIMUM :	0.0200	0.0030	0.042	0.2588	0.0270	0.003	0.243
MINIMUM :	0.0005	0.0005	0.003	0.0127	0.0010	0.001	0.004
RANGE :	0.0195	0.0025	0.038	0.2461	0.0260	0.002	0.239
ARITH. MEAN :	0.0047	0.0008	0.011	0.0714	0.0093	0.001	0.049
ARITH. STD. DEV :	0.0041	0.0005	0.008	0.0622	0.0056	0.000	0.053
GEOM. MEAN :	0.0034	0.0007	0.009	0.0506	0.0079	0.001	0.031
GEOM. STD. DEV. :	0.8516	0.4637	0.619	0.8423	0.6141	0.180	1.012
1ST QUARTILE :	0.0020	0.0005	0.006	0.0240	0.0060	0.001	0.013
2ND QUARTILE :	0.0040	0.0005	0.008	0.0453	0.0080	0.001	0.038
3RD QUARTILE :	0.0060	0.0010	0.013	0.1030	0.0105	0.001	0.066
VOL. WGT. MEAN :	0.0041	0.0007	0.009	0.0629	0.0091	0.001	0.044

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CENTRAL REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31.80 TO JAN 5.82

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		COPPER	CADMIUM	FREE H+ LAB MG/L
		MG/L	MG/L	
# OF SAMPLES	:	40.0000	51.00000	53.0000
MAXIMUM	:	0.0208	0.01400	0.1380
MINIMUM	:	0.0008	0.00005	0.0058
RANGE	:	0.0200	0.01395	0.1323
ARITH. MEAN	:	0.0040	0.00053	0.0615
ARITH. STD. DEV	:	0.0039	0.00197	0.0317
GEOM. MEAN	:	0.0028	0.00016	0.0522
GEOM. STD. DEV.	:	0.8360	1.15003	0.6556
1ST QUARTILE	:	0.0015	0.00005	0.0385
2ND QUARTILE	:	0.0030	0.00010	0.0537
3RD QUARTILE	:	0.0038	0.00025	0.0813
VOL. WGT. MEAN	:	0.0037	0.00049	0.0630

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : NORTHEASTERN REGION/CUMJLATIVE PRECIP.

PERIOD OF REPORT : JAN 5,81 TO JAN 9,82

PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	CALCIUM MG/L
# OF SAMPLES :	107.0	81.0	87.00	88.0000	94.00	94.000	88.000
MAXIMUM :	221.2	54.5	5.47	0.1658	6.05	0.960	0.950
MINIMUM :	12.0	10.6	3.96	0.0284	0.30	0.030	0.020
RANGE :	209.2	43.9	1.51	0.1374	5.75	0.930	0.930
ARITH. MEAN :	68.2	26.4	4.37	0.0810	2.65	0.397	0.247
ARITH. STD. DEV :	42.0	10.4	0.30	0.0292	1.25	0.192	0.229
GEOM. MEAN :	56.8	24.5	4.36	0.0753	2.35	0.346	0.172
GEOM. STD. DEV. :	0.6	0.4	0.07	0.4029	0.52	0.574	0.857
1ST QUARTILE :	35.0	19.4	4.15	0.0598	1.65	0.270	0.090
2ND QUARTILE :	56.5	24.4	4.29	0.0824	2.40	0.375	0.160
3RD QUARTILE :	92.5	31.4	4.49	0.0998	3.50	0.510	0.300
VOL. WGT. MEAN :	*****	26.5	*****	0.0805	2.81	0.368	0.234

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
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APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : NORTHEASTERN REGION/CUMJLATIVE PRECIP.

PERIOD OF REPORT : JAN 5,81 TO JAN 9,82

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	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	91.000	81.000	85.000	86.000	82.000	92.000	83.0000
MAXIMUM :	0.650	1.680	0.205	0.370	0.500	0.990	0.2500
MINIMUM :	0.005	0.040	0.002	0.005	0.005	0.001	0.0010
RANGE :	0.645	1.640	0.202	0.365	0.495	0.989	0.2490
ARITH. MEAN :	0.138	0.517	0.045	0.064	0.067	0.366	0.0236
ARITH. STD. DEV :	0.116	0.316	0.046	0.078	0.075	0.219	0.0430
GEOM. MEAN :	0.096	0.431	0.025	0.039	0.044	0.282	0.0111
GEOM. STD. DEV. :	0.962	0.644	1.197	0.980	0.946	0.953	1.1579
1ST QUARTILE :	0.050	0.285	0.010	0.020	0.020	0.207	0.0050
2ND QUARTILE :	0.105	0.420	0.030	0.030	0.040	0.329	0.0100
3RD QUARTILE :	0.185	0.670	0.065	0.070	0.085	0.505	0.0200
VOL. WGT. MEAN :	0.115	0.502	0.042	0.067	0.053	0.359	0.0272

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
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STATION NAME : NORTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5,81 TO JAN 9,82

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	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINIUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	73.0000	74.0000	67.000	61.0000	73.0000	74.000	60.000
MAXIMUM :	0.0210	0.0070	0.066	0.4806	0.0140	0.004	0.636
MINIMUM :	0.0005	0.0005	0.002	0.0040	0.0005	0.001	0.004
RANGE :	0.0205	0.0065	0.064	0.4766	0.0135	0.003	0.632
ARITH. MEAN :	0.0043	0.0011	0.012	0.0692	0.0056	0.001	0.065
ARITH. STD. DEV :	0.0043	0.0012	0.011	0.0876	0.0032	0.000	0.119
GEOM. MEAN :	0.0028	0.0008	0.009	0.0410	0.0045	0.001	0.025
GEOM. STD. DEV. :	0.9544	0.7367	0.770	0.9807	0.7763	0.195	1.296
1ST QUARTILE :	0.0015	0.0005	0.006	0.0212	0.0030	0.001	0.010
2ND QUARTILE :	0.0030	0.0005	0.008	0.0326	0.0055	0.001	0.021
3RD QUARTILE :	0.0050	0.0010	0.016	0.0766	0.0080	0.001	0.055
VOL. WGT. MEAN :	0.0043	0.0010	0.011	0.0744	0.0054	0.001	0.070

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ONTARIO MINISTRY OF THE ENVIRONMENT  
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STATION NAME : NORTHEASTERN REGION/CUMJLATIVE PRECIP.

PERIOD OF REPORT : JAN 5,81 TO JAN 9,82

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	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	68.0000	74.00000	87.0000
MAXIMUM :	0.0255	0.00140	0.1096
MINIMUM :	0.0007	0.00005	0.0034
RANGE :	0.0247	0.00135	0.1063
ARITH. MEAN :	0.0044	0.00024	0.0515
ARITH. STD. DEV :	0.0037	0.00027	0.0265
GEOM. MEAN :	0.0034	0.00015	0.0429
GEOM. STD. DEV. :	0.7009	0.98566	0.6941
1ST QUARTILE :	0.0023	0.00005	0.0313
2ND QUARTILE :	0.0033	0.00020	0.0501
3RD QUARTILE :	0.0056	0.00030	0.0708
VOL. WGT. MEAN :	0.0040	0.00020	0.0508

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
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STATION NAME : NORTHWESTERN REGION/CUMJLATIVE PRECIP.

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	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	JMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	52.0	31.0	32.00	39.0000	43.00	45.000	35.000
MAXIMUM :	165.0	31.5	6.35	0.0886	4.30	0.740	0.800
MINIMUM :	6.3	10.0	4.30	0.0254	0.30	0.070	0.050
RANGE :	158.7	21.5	2.05	0.0632	4.00	0.670	0.750
ARITH. MEAN :	42.3	17.6	4.82	0.0502	1.65	0.309	0.259
ARITH. STD. DEV :	30.3	5.8	0.51	0.0186	0.98	0.164	0.205
GEO.M. MEAN :	33.4	16.8	4.79	0.0469	1.40	0.267	0.193
GEO.M. STD. DEV. :	0.7	0.3	0.10	0.3785	0.59	0.560	0.791
1ST QUARTILE :	21.4	13.1	4.49	0.0338	0.97	0.180	0.100
2ND QUARTILE :	36.8	16.0	4.61	0.0431	1.30	0.250	0.190
3RD QUARTILE :	54.3	20.1	5.05	0.0635	1.97	0.455	0.355
VOL. WGT. MEAN :	*****	16.4	*****	0.0494	1.49	0.263	0.252

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NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
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STATION NAME : NORTHWESTERN REGION/CUMJLATIVE PRECIP.

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	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	45.000	40.000	36.000	41.000	39.000	43.000	41.0000
MAXIMUM :	0.810	1.350	0.445	0.210	0.220	1.050	0.0900
MINIMUM :	0.005	0.080	0.002	0.005	0.010	0.050	0.0010
RANGE :	0.805	1.270	0.442	0.205	0.210	1.000	0.0890
ARITH. MEAN :	0.130	0.486	0.058	0.050	0.048	0.342	0.0286
ARITH. STD. DEV :	0.142	0.313	0.082	0.052	0.039	0.251	0.0236
GEOM. MEAN :	0.081	0.399	0.029	0.031	0.038	0.271	0.0182
GEOM. STD. DEV. :	1.094	0.648	1.222	0.997	0.669	0.686	1.1250
1ST QUARTILE :	0.060	0.240	0.010	0.020	0.020	0.167	0.0100
2ND QUARTILE :	0.090	0.380	0.030	0.020	0.030	0.238	0.0220
3RD QUARTILE :	0.135	0.720	0.062	0.060	0.060	0.430	0.0420
VOL. WGT. MEAN :	0.101	0.441	0.051	0.056	0.047	0.284	0.0304

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ONTARIO MINISTRY OF THE ENVIRONMENT  
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STATION NAME : NORTHWESTERN REGION/CUMJLATIVE PRECIP.

PERIOD OF REPORT : DEC 28,80 TO JAN 5,82

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	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	33.0000	33.0000	30.000	25.0000	33.0000	33.000	26.000
MAXIMUM :	0.0950	0.0080	0.024	0.2371	0.0110	0.005	0.208
MINIMUM :	0.0005	0.0005	0.001	0.0104	0.0005	0.001	0.003
RANGE :	0.0945	0.0075	0.023	0.2267	0.0105	0.004	0.205
ARITH. MEAN :	0.0072	0.0008	0.009	0.0698	0.0045	0.001	0.051
ARITH. STD. DEV :	0.0167	0.0013	0.005	0.0563	0.0027	0.001	0.050
GEOM. MEAN :	0.0032	0.0006	0.007	0.0508	0.0036	0.001	0.032
GEOM. STD. DEV. :	1.1197	0.5328	0.711	0.8432	0.7633	0.302	1.035
1ST QUARTILE :	0.0020	0.0005	0.004	0.0224	0.0020	0.001	0.013
2ND QUARTILE :	0.0030	0.0005	0.009	0.0519	0.0040	0.001	0.034
3RD QUARTILE :	0.0055	0.0005	0.012	0.0888	0.0060	0.001	0.059
VOL. WGT. MEAN :	0.0061	0.0009	0.008	0.0665	0.0042	0.001	0.050

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STATION NAME : NORTHWESTERN REGION/CUMJLATIVE PRECIP.

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	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	30.0000	32.00000	32.0000
MAXIMUM :	0.0237	0.00050	0.0501
MINIMUM :	0.0012	0.00005	0.0004
RANGE :	0.0225	0.00045	0.0497
ARITH. MEAN :	0.0060	0.00014	0.0228
ARITH. STD. DEV :	0.0062	0.00012	0.0149
GEOM. MEAN :	0.0039	0.00011	0.0152
GEOM. STD. DEV. :	0.9074	0.71037	1.1642
1ST QUARTILE :	0.0016	0.00005	0.0091
2ND QUARTILE :	0.0030	0.00010	0.0246
3RD QUARTILE :	0.0074	0.00020	0.0320
VOL. WGT. MEAN :	0.0059	0.00013	0.0207

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SOUTHEASTERN REGION/CUMJLATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

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	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	JMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	48.0	43.0	41.00	44.0000	47.00	47.000	43.000
MAXIMUM :	189.5	57.0	5.09	0.1590	6.00	1.390	0.980
MINIMUM :	12.1	10.7	3.89	0.0000	0.25	0.160	0.040
RANGE :	177.4	46.3	1.20	0.1590	5.75	1.230	0.940
ARITH. MEAN :	81.6	33.3	4.28	0.0900	3.43	0.567	0.385
ARITH. STD. DEV :	39.9	11.6	0.28	0.0335	1.49	0.264	0.290
GEOM. MEAN :	70.3	31.2	4.27	0.0913	3.01	0.517	0.280
GEOM. STD. DEV. :	0.6	0.4	0.06	0.3862	0.59	0.428	0.860
1ST QUARTILE :	56.9	25.1	4.09	0.0646	2.17	0.390	0.140
2ND QUARTILE :	80.7	30.8	4.22	0.0944	3.17	0.500	0.295
3RD QUARTILE :	104.5	41.8	4.32	0.1154	4.88	0.640	0.615
VOL. WGT. MEAN :	*****	32.0	*****	0.0856	3.48	0.492	0.355

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

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	CHLORIDE	KJELDAHL	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	PHOSPHORUS
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	47.000	42.000	37.000	45.000	43.000	46.000	42.0000
MAXIMUM :	0.740	1.410	0.260	0.420	0.540	0.980	0.1620
MINIMUM :	0.040	0.170	0.005	0.005	0.010	0.064	0.0005
RANGE :	0.700	1.240	0.255	0.415	0.530	0.916	0.1615
ARITH. MEAN :	0.237	0.562	0.055	0.070	0.127	0.373	0.0282
ARITH. STD. DEV :	0.172	0.320	0.053	0.083	0.124	0.213	0.0338
GEOM. MEAN :	0.185	0.483	0.036	0.045	0.081	0.314	0.0149
GEOM. STD. DEV. :	0.721	0.557	0.989	0.912	0.992	0.621	1.2203
1ST QUARTILE :	0.120	0.300	0.020	0.025	0.040	0.194	0.0050
2ND QUARTILE :	0.165	0.480	0.035	0.040	0.085	0.353	0.0175
3RD QUARTILE :	0.325	0.685	0.065	0.070	0.165	0.475	0.0320
VOL. WGT. MEAN :	0.196	0.589	0.051	0.070	0.102	0.375	0.0354

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

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STATION NAME : SOUTHEASTERN REGION/CUMULATIVE PRECIP.

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	MANGANESE	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	38.0000	38.0000	33.000	32.0000	37.0000	38.000	33.000
MAXIMUM :	0.0160	0.0030	0.023	0.4276	0.0150	0.002	0.323
MINIMUM :	0.0005	0.0005	0.003	0.0115	0.0040	0.001	0.004
RANGE :	0.0155	0.0025	0.019	0.4161	0.0110	0.001	0.319
ARITH. MEAN :	0.0043	0.0006	0.010	0.0564	0.0083	0.001	0.042
ARITH. STD. DEV :	0.0037	0.0004	0.005	0.0775	0.0028	0.000	0.064
GEOM. MEAN :	0.0031	0.0006	0.009	0.0369	0.0078	0.001	0.022
GEOM. STD. DEV. :	0.8737	0.3520	0.471	0.8203	0.3354	0.112	1.057
1ST QUARTILE :	0.0020	0.0005	0.006	0.0215	0.0065	0.001	0.010
2ND QUARTILE :	0.0030	0.0005	0.008	0.0296	0.0080	0.001	0.016
3RD QUARTILE :	0.0050	0.0005	0.012	0.0606	0.0095	0.001	0.043
VOL. WGT. MEAN :	0.0039	0.0006	0.009	0.0469	0.0078	0.001	0.034

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

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	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	32.0000	36.00000	41.0000
MAXIMUM :	0.0208	0.00130	0.1288
MINIMUM :	0.0009	0.00005	0.0081
RANGE :	0.0199	0.00125	0.1207
ARITH. MEAN :	0.0047	0.00022	0.0611
ARITH. STD. DEV :	0.0043	0.00027	0.0280
GEOM. MEAN :	0.0034	0.00014	0.0524
GEOM. STD. DEV. :	0.7947	0.93498	0.6456
1ST QUARTILE :	0.0018	0.00005	0.0457
2ND QUARTILE :	0.0034	0.00010	0.0589
3RD QUARTILE :	0.0056	0.00030	0.0776
VOL. WGT. MEAN :	0.0042	0.00018	0.0576

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : SOUTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 1

	PRECIP.	CONDUCT.	PH	TOTAL H+	SULPHATE	NITRATE	CALCIUM
	MM	UMHO/CM	LAB	TO PH8.3	MG/L	AS N	MG/L
				MG/L		MG/L	
# OF SAMPLES :	99.0	86.0	77.00	85.0000	92.00	90.000	70.000
MAXIMUM :	165.0	82.0	5.03	0.1914	10.50	1.520	1.100
MINIMUM :	13.0	12.8	3.79	0.0000	1.95	0.330	0.080
RANGE :	152.0	69.2	1.24	0.1914	8.55	1.190	1.020
ARITH. MEAN :	68.6	38.3	4.21	0.0978	4.76	0.687	0.458
ARITH. STD. DEV :	35.5	15.0	0.24	0.0384	2.02	0.274	0.240
GEOM. MEAN :	58.2	35.6	4.21	0.0943	4.37	0.640	0.397
GEOM. STD. DEV. :	0.6	0.4	0.05	0.4079	0.42	0.369	0.555
1ST QUARTILE :	39.5	27.1	4.03	0.0726	3.10	0.465	0.260
2ND QUARTILE :	66.5	34.1	4.19	0.0956	4.20	0.620	0.370
3RD QUARTILE :	91.0	46.1	4.34	0.1168	6.13	0.800	0.625
VOL. WGT. MEAN :	*****	37.4	*****	0.0969	4.46	0.620	0.436

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE  
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : SOUTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 2

	CHLORIDE	KJELDAHL	MAGNESIM	POTASSIM	SODIUM	AMMONIUM AS N	PHOSPHOR
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	86.000	81.000	75.000	83.000	81.000	85.000	83.0000
MAXIMUM :	1.270	2.620	0.360	0.440	0.580	2.080	0.2220
MINIMUM :	0.020	0.300	0.015	0.010	0.005	0.078	0.0005
RANGE :	1.250	2.320	0.345	0.430	0.575	2.002	0.2215
ARITH. MEAN :	0.272	0.792	0.110	0.068	0.102	0.637	0.0249
ARITH. STD. DEV :	0.224	0.415	0.084	0.062	0.109	0.373	0.0287
GEOM. MEAN :	0.206	0.706	0.085	0.051	0.064	0.547	0.0166
GEOM. STD. DEV. :	0.774	0.476	0.760	0.779	1.014	0.568	0.9283
1ST QUARTILE :	0.130	0.455	0.050	0.030	0.020	0.364	0.0100
2ND QUARTILE :	0.220	0.735	0.085	0.050	0.075	0.570	0.0150
3RD QUARTILE :	0.310	0.870	0.140	0.085	0.120	0.730	0.0325
VOL. WGT. MEAN :	0.212	0.696	0.097	0.063	0.079	0.554	0.0228

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : SOUTHWESTERN REGION/CUMJLATIVE PRECIP.

PERIOD OF REPORT : DEC 31.80 TO JAN 5.82

PAGE : 3

	MANGANSE	VICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
# OF SAMPLES :	79.0000	80.0000	72.000	67.0000	78.0000	82.000	68.000
MAXIMUM :	0.0190	0.0040	0.088	0.2499	0.0230	0.002	0.493
MINIMUM :	0.0010	0.0005	0.002	0.0076	0.0005	0.001	0.004
RANGE :	0.0180	0.0035	0.086	0.2423	0.0225	0.001	0.489
ARITH. MEAN :	0.0053	0.0008	0.015	0.0698	0.0089	0.001	0.063
ARITH. STD. DEV :	0.0035	0.0008	0.014	0.0464	0.0042	0.000	0.067
GEOM. MEAN :	0.0044	0.0007	0.011	0.0568	0.0078	0.001	0.046
GEOM. STD. DEV. :	0.5872	0.6012	0.745	0.6658	0.5794	0.126	0.815
1ST QUARTILE :	0.0030	0.0005	0.006	0.0365	0.0060	0.001	0.025
2ND QUARTILE :	0.0050	0.0005	0.010	0.0559	0.0090	0.001	0.051
3RD QUARTILE :	0.0060	0.0005	0.017	0.0963	0.0110	0.001	0.074
VOL. WGT. MEAN :	0.0049	0.0008	0.013	0.0674	0.0084	0.001	0.056

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF OBSERVED CONCENTRATIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SOUTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,80 TO JAN 5,82

PAGE : 4

	COPPER	CADMIUM	FREE H+
	MG/L	MG/L	LAB MG/L
# OF SAMPLES :	71.0000	78.00000	77.0000
MAXIMUM :	0.0136	0.00200	0.1622
MINIMUM :	0.0008	0.00005	0.0093
RANGE :	0.0128	0.00195	0.1528
ARITH. MEAN :	0.0046	0.00027	0.0696
ARITH. STD. DEV :	0.0033	0.00029	0.0333
GEOM. MEAN :	0.0036	0.00019	0.0613
GEOM. STD. DEV. :	0.7467	0.85297	0.5419
1ST QUARTILE :	0.0020	0.00010	0.0452
2ND QUARTILE :	0.0033	0.00020	0.0638
3RD QUARTILE :	0.0067	0.00030	0.0872
VOL. WGT. MEAN :	0.0046	0.00025	0.0686

\*\*\*\*\* : INSUFFICIENT DATA OR NOT APPLICABLE



**PART VII**

**SUMMARY STATISTICS OF OBSERVED DEPOSITION BY STATION**

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : ALVINSTON/CUMULATIVE PRECIP.

#05

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	10.0000	11.0000	11.00	11.000	8.000	8.000
MAXIMUM :	165.0	10.4108	14.7180	568.75	73.800	76.440	23.100
MINIMUM :	26.5	1.1943	0.0000	150.00	22.000	15.200	3.300
RANGE :	138.5	9.2165	14.7180	418.75	51.800	61.240	19.800
ARITH. MEAN :	76.8	4.7707	6.9822	322.31	50.997	39.019	12.761
ARITH. STD. DEV :	41.9	3.2215	4.3904	142.04	18.686	20.066	7.355
GEOM. MEAN :	66.4	3.9098	5.7284	294.88	47.501	34.580	10.739
GEOM. STD. DEV. :	0.6	0.6715	0.5231	0.44	0.412	0.536	0.666
1ST QUARTILE :	40.0	2.6560	3.3130	191.00	32.910	22.320	7.355
2ND QUARTILE :	74.5	3.4697	6.1316	267.15	42.575	37.970	10.910
3RD QUARTILE :	104.1	5.4462	9.0973	438.17	67.495	49.965	19.579

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : ALVINSTON/CUMULATIVE PRECIP.

#05

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	11.000	9.000	10.000	9.000	11.000	11.0000	11.0000
MAXIMUM :	96.760	13.195	18.040	12.600	75.520	4.1300	1.4760
MINIMUM :	24.790	2.400	1.600	1.180	6.396	0.4020	0.1200
RANGE :	71.970	10.795	16.440	11.420	69.124	3.7280	1.3560
ARITH. MEAN :	52.832	6.869	5.658	4.958	38.846	1.6295	0.4753
ARITH. STD. DEV :	22.125	3.500	4.983	4.276	18.554	1.3984	0.3712
GEOM. MEAN :	48.590	6.056	4.265	3.691	33.398	1.1678	0.3776
GEOM. STD. DEV. :	0.438	0.551	0.768	0.797	0.661	0.8565	0.7125
1ST QUARTILE :	28.120	3.775	2.185	2.172	21.585	0.4800	0.1870
2ND QUARTILE :	48.190	6.124	4.010	2.850	39.290	0.9603	0.3540
3RD QUARTILE :	61.540	7.965	6.980	4.500	48.975	2.3054	0.5580

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : ALVINSTON/CUMULATIVE PRECIP.

#05

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	11.0000	10.000	9.0000	11.0000	11.000	10.000	10.0000
MAXIMUM :	0.1726	7.205	20.4918	1.0548	0.165	18.097	0.9703
MINIMUM :	0.0200	0.517	1.6120	0.2400	0.030	0.441	0.0530
RANGE :	0.1526	6.688	18.8798	0.8148	0.135	17.657	0.9173
ARITH. MEAN :	0.0675	1.687	7.3567	0.6072	0.085	5.305	0.3511
ARITH. STD. DEV :	0.0451	2.070	5.6116	0.2715	0.038	5.228	0.2915
GEOM. MEAN :	0.0561	1.110	5.8875	0.5480	0.077	3.536	0.2583
GEOM. STD. DEV. :	0.6329	0.858	0.7112	0.4951	0.489	1.012	0.8561
1ST QUARTILE :	0.0315	0.603	4.2627	0.3575	0.049	2.070	0.1399
2ND QUARTILE :	0.0520	0.734	5.4044	0.4950	0.081	3.954	0.2469
3RD QUARTILE :	0.0812	1.552	6.7202	0.7635	0.104	4.649	0.3828

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : ALVINSTON/CUMULATIVE PRECIP. #05

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	9.00000
MAXIMUM	:	0.04720
MINIMUM	:	0.00335
RANGE	:	0.04385
ARITH. MFAN	:	0.02081
ARITH. STD. DEV	:	0.01272
GEOM. MEAN	:	0.01709
GEOM. STD. DEV.	:	0.73794
1ST QUARTILE	:	0.01400
2ND QUARTILE	:	0.01705
3RD QUARTILE	:	0.02082

\*\*\*\*\* : INSUFFICIENT DATA

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ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : ATTAWAPISKAT/CUMULATIVE PRECIP. #28

PERIOD OF REPORT : DEC 31, 80 TO JAN 9, 82

PAGE : 1

	PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
	MM	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	11.0	5.0000	8.0000	8.00	8.000	6.000	5.000
MAXIMUM :	221.2	7.2961	6.8572	145.75	23.850	54.901	14.658
MINIMUM :	20.0	0.2701	0.7400	23.91	2.391	9.253	0.398
RANGE :	201.2	7.0260	6.1172	121.84	21.459	45.648	14.259
ARITH. MFAN :	62.6	2.1662	2.6953	70.49	10.350	27.901	6.273
ARITH. STD. DEV :	56.2	2.9594	2.0771	39.47	7.144	15.464	5.248
GEOM. MEAN :	49.2	1.0072	2.0992	61.10	8.192	24.351	3.887
GEOM. STD. DEV. :	0.7	1.4017	0.7606	0.59	0.773	0.594	1.357
1ST QUARTILE :	25.5	0.2725	1.0862	41.28	5.740	14.190	2.299
2ND QUARTILE :	45.0	0.6015	2.3741	65.34	8.466	25.835	4.778
3RD QUARTILE :	69.4	1.4950	3.5223	90.50	14.073	30.403	6.054

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : ATTAWAPISKAT/CUMULATIVE PRECIP. #28

PERIOD OF REPORT : DEC 31, 80 TO JAN 9, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	7.000	5.000	7.000	6.000	8.000	7.0000	4.0000
MAXIMUM :	45.225	10.338	17.696	8.725	27.000	0.7130	0.2852
MINIMUM :	10.600	0.974	0.398	0.797	5.898	0.1461	0.0398
RANGE :	34.625	9.364	17.297	7.928	21.102	0.5669	0.2454
ARITH. MEAN :	21.828	5.262	4.061	3.012	14.813	0.3722	0.1853
ARITH. STD. DEV :	12.336	3.670	6.195	2.893	8.955	0.1820	0.1152
GEOM. MEAN :	19.317	4.016	1.787	2.237	12.372	0.3340	0.1455
GEOM. STD. DEV. :	0.521	0.914	1.361	0.807	0.656	0.5184	0.9151
1ST QUARTILE :	11.676	2.081	0.399	1.073	6.597	0.1730	0.0930
2ND QUARTILE :	15.056	3.788	1.534	2.174	12.778	0.3713	0.2081
3RD QUARTILE :	27.052	5.904	3.432	2.626	23.429	0.4017	0.2776

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : ATTAWAPISKAT/CUMULATIVE PRECIP. #28

PERIOD OF REPORT : DEC 31, 80 TO JAN 9, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	4.0000	3.000	3.0000	4.0000	4.000	3.000	3.0000
MAXIMUM :	0.2700	0.970	5.2377	0.5704	0.080	4.065	1.1788
MINIMUM :	0.0243	0.273	1.4175	0.0974	0.049	0.484	0.2025
RANGE :	0.2457	0.697	3.8202	0.4730	0.031	3.581	0.9763
ARITH. MEAN :	0.0925	0.595	2.8143	0.2912	0.067	1.921	0.6511
ARITH. STD. DEV :	0.1185	0.352	2.1069	0.2122	0.013	1.892	0.4929
GEOM. MEAN :	0.0553	0.523	2.3676	0.2338	0.066	1.337	0.5150
GEOM. STD. DEV. :	1.0781	0.634	0.6973	0.7839	0.212	1.067	0.8854
1ST QUARTILE :	0.0300	*****	*****	0.1284	0.058	*****	*****
2ND QUARTILE :	0.0377	*****	*****	0.2484	0.069	*****	*****
3RD QUARTILE :	0.1549	*****	*****	0.4539	0.075	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : ATTAWAPISKAT/CUMULATIVE PRECIP. #28

PERIOD OF REPORT : DEC 31, 80 TO JAN 9, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	4.00000
MAXIMUM	:	0.03375
MINIMUM	:	0.00243
RANGE	:	0.03132
ARITH. MEAN	:	0.01093
ARITH. STD. DEV	:	0.01522
GEOM. MEAN	:	0.00585
GEOM. STD. DEV.	:	1.18776
1ST QUARTILE	:	0.00300
2ND QUARTILE	:	0.00377
3RD QUARTILE	:	0.01887

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : BEAR ISLAND/CUMULATIVE PRECIP. #24

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	11.0000	10.0000	11.00	11.000	9.000	11.000
MAXIMUM :	139.0	8.2285	10.7670	562.95	63.940	83.400	22.240
MINIMUM :	12.0	0.3992	1.7640	36.00	7.840	1.560	0.760
RANGE :	127.0	7.8293	9.0030	526.95	56.100	81.840	21.480
ARITH. MEAN :	66.3	3.0358	5.9035	205.47	23.906	14.533	7.442
ARITH. STD. DEV :	39.9	2.8038	3.4534	173.46	16.579	25.975	6.346
GEOM. MEAN :	54.1	1.9735	4.9661	146.07	19.635	6.995	5.003
GEOM. STD. DEV. :	0.7	1.0236	0.6415	0.88	0.652	1.096	1.039
1ST QUARTILE :	35.0	0.7484	2.7568	73.60	10.240	3.710	1.635
2ND QUARTILE :	51.0	1.7769	4.8228	105.15	15.780	5.740	6.590
3RD QUARTILE :	98.5	4.2937	8.4783	339.42	30.515	8.475	8.085

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : BEAR ISLAND/CUMULATIVE PRECIP. #24

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	10.000	10.000	9.000	10.000	11.000	10.0000	10.0000
MAXIMUM :	156.240	11.815	11.160	11.120	83.400	21.3900	2.2240
MINIMUM :	3.760	0.135	0.540	1.030	0.094	0.1320	0.0270
RANGE :	152.480	11.680	10.620	10.090	83.306	21.2580	2.1970
ARITH. MEAN :	40.891	2.927	4.419	3.728	25.221	3.1070	0.4769
ARITH. STD. DEV :	48.434	3.755	3.435	3.589	26.443	6.5208	0.6546
GEOM. MEAN :	22.833	1.461	3.031	2.560	11.246	0.9101	0.2442
GEOM. STD. DEV. :	1.153	1.307	1.037	0.894	1.853	1.5354	1.2451
1ST QUARTILE :	9.780	0.525	1.180	1.095	4.806	0.2140	0.1020
2ND QUARTILE :	22.185	1.492	3.585	2.380	14.144	0.9795	0.2070
3RD QUARTILE :	40.795	2.370	5.795	3.960	29.612	1.3825	0.4900

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : BEAR ISLAND/CUMULATIVE PRECIP. #24

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	10.0000	10.000	8.0000	10.0000	10.000	8.000	9.0000
MAXIMUM :	0.2780	3.155	66.8034	0.9730	0.139	70.807	0.7404
MINIMUM :	0.0140	0.268	1.1524	0.0515	0.028	0.456	0.0928
RANGE :	0.2640	2.886	65.6509	0.9215	0.111	70.351	0.6476
ARITH. MEAN :	0.0790	1.082	10.4529	0.4108	0.074	10.216	0.2466
ARITH. STD. DEV :	0.0870	0.964	22.8023	0.3160	0.039	24.507	0.2061
GEOM. MEAN :	0.0488	0.760	3.2774	0.2753	0.064	1.986	0.1974
GEOM. STD. DEV. :	1.0187	0.884	1.3106	1.0741	0.574	1.630	0.6553
1ST QUARTILE :	0.0175	0.358	1.3836	0.0750	0.035	0.595	0.1273
2ND QUARTILE :	0.0492	0.528	2.4952	0.3870	0.073	1.672	0.1438
3RD QUARTILE :	0.0757	1.680	3.9547	0.5175	0.098	2.966	0.2257

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : BEAR ISLAND/CUMULATIVE PRECIP. #24

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE 1 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	10.00000
MAXIMUM	:	0.02820
MINIMUM	:	0.00270
RANGE	:	0.02550
ARITH. MEAN	:	0.01661
ARITH. STD. DEV	:	0.00928
GEOM. MEAN	:	0.01339
GEOM. STD. DEV.	:	0.78451
1ST QUARTILE	:	0.00722
2ND QUARTILE	:	0.01830
3RD QUARTILE	:	0.02260

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CAMPBELLFORD/CUMULATIVE PRECIP. #13

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	11.0000	10.0000	11.00	12.000	10.000	11.000
MAXIMUM :	155.0	9.0553	12.9276	592.80	68.400	52.260	40.300
MINIMUM :	4.0	0.3435	1.6960	14.20	4.840	1.560	2.000
RANGE :	151.0	8.7118	11.2316	578.60	63.560	50.700	38.300
ARITH. MEAN :	69.8	3.8000	6.7263	244.46	38.095	24.357	14.292
ARITH. STD. DEV :	40.4	2.9602	3.9383	174.65	20.077	15.886	11.432
GEOM. MEAN :	53.6	2.4431	5.4664	158.70	31.051	17.263	10.766
GEOM. STD. DEV. :	1.0	1.1349	0.7371	1.19	0.774	1.068	0.828
1ST QUARTILE :	45.8	0.6167	2.2354	45.32	17.677	8.305	5.817
2ND QUARTILE :	68.0	3.2127	6.5442	275.87	40.845	26.390	11.308
3RD QUARTILE :	88.1	5.8034	9.1484	333.35	52.800	32.380	13.965

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CAMPBELLFORD/CUMULATIVE PRECIP. #13

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	9.000	11.000	10.000	11.000	11.000	10.0000	9.0000
MAXIMUM :	96.900	7.035	9.120	24.800	93.480	10.4880	0.5300
MINIMUM :	1.960	0.080	0.080	0.680	1.032	0.0040	0.0597
RANGE :	94.940	6.955	9.040	24.120	92.448	10.4840	0.4703
ARITH. MEAN :	46.194	3.299	3.850	6.392	33.680	1.8820	0.2946
ARITH. STD. DEV :	31.439	2.635	3.046	6.714	27.660	3.1258	0.1696
GEOM. MEAN :	31.207	1.607	2.000	4.211	21.095	0.4723	0.2366
GEOM. STD. DEV. :	1.198	1.635	1.577	0.987	1.251	2.3189	0.7852
1ST QUARTILE :	18.592	0.205	0.425	1.680	9.128	0.0812	0.1387
2ND QUARTILE :	40.875	3.017	3.845	4.532	23.530	0.9600	0.2460
3RD QUARTILE :	58.265	5.445	5.488	7.638	46.985	1.6055	0.4180

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CAMPBELLFORD/CUMULATIVE PRECIP. #13

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	9.0000	8.000	6.0000	9.0000	9.000	7.000	7.0000
MAXIMUM :	0.1140	1.240	14.6258	1.2400	0.155	15.041	0.8187
MINIMUM :	0.0132	0.316	1.9685	0.1791	0.026	0.695	0.1315
RANGE :	0.1007	0.924	12.6573	1.0609	0.128	14.347	0.6873
ARITH. MEAN :	0.0501	0.834	5.8940	0.6250	0.087	5.244	0.4297
ARITH. STD. DEV :	0.0305	0.342	4.6742	0.3946	0.039	4.692	0.2854
GEOM. MEAN :	0.0425	0.761	4.6835	0.5078	0.079	3.714	0.3505
GEOM. STD. DEV. :	0.6239	0.487	0.7257	0.7132	0.521	0.957	0.7023
1ST QUARTILE :	0.0317	0.555	2.4042	0.2757	0.063	1.544	0.1725
2ND QUARTILE :	0.0352	0.877	4.4789	0.4180	0.070	3.877	0.2614
3RD QUARTILE :	0.0560	1.126	6.3471	0.8960	0.107	5.413	0.6606

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CAMPBELLFORD/CUMULATIVE PRECIP. #13

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	9.00000
MAXIMUM	:	0.08358
MINIMUM	:	0.00345
RANGE	:	0.08013
ARITH. MEAN	:	0.01840
ARITH. STD. DEV	:	0.02589
GEOM. MEAN	:	0.01022
GEOM. STD. DEV.	:	1.05028
1ST QUARTILE	:	0.00430
2ND QUARTILE	:	0.00707
3RD QUARTILE	:	0.01240

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : COLCHESTER/CUMULATIVE/WET

#01

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
	MM	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	12.0	11.0000	11.0000	12.00	11.000	10.000	12.000
MAXIMUM :	129.0	14.2557	18.4212	922.95	88.779	76.230	35.090
MINIMUM :	19.0	1.1546	2.3144	91.30	15.620	13.640	4.800
RANGE :	110.0	13.1011	16.1068	831.65	73.159	62.590	30.290
ARITH. MEAN :	74.9	6.9494	9.9523	404.31	50.463	37.210	19.319
ARITH. STD. DEV :	41.0	4.4556	5.3642	274.14	26.666	21.460	9.412
GEOM. MEAN :	61.3	5.4777	8.3828	311.84	43.458	31.545	16.939
GEOM. STD. DEV. :	0.7	0.7877	0.6667	0.80	0.600	0.627	0.575
1ST QUARTILE :	31.5	2.6836	4.6649	162.60	23.840	14.395	13.675
2ND QUARTILE :	81.9	5.4087	8.3802	383.75	44.860	35.210	17.085
3RD QUARTILE :	109.5	9.1719	13.6665	605.67	70.035	44.900	25.115

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : COLCHESTER/CUMULATIVE/WET

#01

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES :	10.000	9.000	10.000	10.000	11.000	11.0000	10.0000
MAXIMUM :	96.800	17.545	11.880	18.150	75.020	6.1380	0.7260
MINIMUM :	18.480	3.250	0.650	2.400	12.390	0.1950	0.1540
RANGE :	78.320	14.295	11.230	15.750	62.630	5.9430	0.5720
ARITH. MEAN :	48.946	8.466	5.158	7.129	38.518	1.7248	0.4236
ARITH. STD. DEV. :	28.906	4.742	3.717	4.965	22.800	1.7161	0.2126
GEOM. MEAN :	40.791	7.239	3.815	5.921	31.883	1.1298	0.3745
GEOM. STD. DEV. :	0.660	0.617	0.902	0.622	0.676	0.9990	0.5386
1ST QUARTILE :	19.100	3.435	2.025	3.810	14.640	0.4665	0.2205
2ND QUARTILE :	48.000	8.510	4.090	5.030	38.005	0.8980	0.3835
3RD QUARTILE :	69.390	9.455	7.420	8.245	52.090	2.2980	0.5425

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : COLCHESTER/CUMULATIVE/WET

#01

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	9.0000	9.000	9.0000	8.0000	10.000	9.000	9.0000
MAXIMUM :	0.0645	2.019	14.0118	1.2000	0.129	12.366	1.3334
MINIMUM :	0.0205	0.772	0.9519	0.3520	0.022	0.496	0.0640
RANGE :	0.0440	1.247	13.0599	0.8480	0.107	11.870	1.2694
ARITH. MEAN :	0.0478	1.190	6.3511	0.8798	0.092	5.009	0.4050
ARITH. STD. DEV :	0.0135	0.435	4.5024	0.3048	0.032	4.048	0.3845
GEOM. MEAN :	0.0456	1.127	4.6393	0.8218	0.084	3.426	0.2908
GEOM. STD. DEV. :	0.3469	0.343	0.9319	0.4242	0.517	1.025	0.8657
1ST QUARTILE :	0.0410	0.843	2.0503	0.6515	0.070	1.683	0.1797
2ND QUARTILE :	0.0465	0.954	4.7448	0.9400	0.098	3.091	0.2490
3RD QUARTILE :	0.0547	1.370	9.2275	1.1518	0.111	6.690	0.3825

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : COLCHESTER/CUMULATIVE/WET #01

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	10.00000
MAXIMUM	:	0.03040
MINIMUM	:	0.00490
RANGE	:	0.02550
ARITH. MEAN	:	0.01676
ARITH. STD. DEV	:	0.00979
GEOM. MEAN	:	0.01374
GEOM. STD. DEV.	:	0.70665
1ST QUARTILE	:	0.00625
2ND QUARTILE	:	0.01760
3RD QUARTILE	:	0.02500

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : COLDWATER/CUMULATIVE PRECIP.

#12

PERIOD OF REPORT : AUG 31, 81 TO JAN 5, 82

PAGE : 1

	PRECIP.	FREE H+	TOTAL H+	SULPHATE	NITRATE	CALCIUM	CHLORIDE
	MM	LAB MG/M**2	TO PH8.3 MG/M**2	MG/M**2	AS N MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	4.0	4.0000	4.0000	4.00	4.000	4.000	4.000
MAXIMUM :	100.0	9.3326	11.9800	385.00	44.000	19.760	8.000
MINIMUM :	52.0	1.1376	2.4544	33.80	10.920	6.240	3.950
RANGE :	48.0	8.1949	9.5256	351.20	33.080	13.520	4.050
ARITH. MEAN :	76.8	4.0905	6.2860	173.39	25.172	14.055	6.067
ARITH. STD. DEV :	19.7	3.5972	4.0353	149.40	13.823	5.699	1.658
GEOM. MEAN :	74.7	3.0982	5.3882	125.10	22.370	12.942	5.884
GEOM. STD. DEV. :	0.3	0.8612	0.6474	1.00	0.572	0.505	0.293
1ST QUARTILE :	64.0	2.0364	3.8644	82.07	16.100	10.230	5.015
2ND QUARTILE :	77.5	2.9459	5.3548	137.37	22.885	15.110	6.160
3RD QUARTILE :	89.5	6.1447	8.7076	264.70	34.245	17.880	7.120

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : COLDWATER/CUMULATIVE PRECIP. #12

PERIOD OF REPORT : AUG 31. 81 TO JAN 5.82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	4.000	4.000	4.000	4.000	4.000	4.0000	4.0000
MAXIMUM :	35.000	2.000	5.320	3.160	28.600	1.9000	0.2000
MINIMUM :	15.200	0.395	0.520	1.520	6.864	0.4160	0.0520
RANGE :	19.800	1.605	4.800	1.640	21.736	1.4840	0.1480
ARITH. MEAN :	22.760	1.174	2.855	2.570	15.544	0.9855	0.1207
ARITH. STD. DEV :	8.635	0.722	2.196	0.739	9.324	0.6380	0.0676
GEOM. MEAN :	21.665	0.984	2.045	2.474	13.627	0.8500	0.1057
GEOM. STD. DEV. :	0.355	0.726	1.050	0.335	0.592	0.6227	0.6128
1ST QUARTILE :	16.960	0.587	1.050	2.060	9.284	0.6030	0.0655
2ND QUARTILE :	20.420	1.150	2.790	2.800	13.357	0.8130	0.1155
3RD QUARTILE :	28.560	1.760	4.660	3.080	21.805	1.3680	0.1760

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : COLDWATER/CUMULATIVE PRECIP.

#12

PERIOD OF REPORT : AUG 31, 81 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	4.0000	4.000	4.0000	4.0000	4.000	4.000	4.0000
MAXIMUM :	0.0760	1.136	4.6504	0.8000	0.100	2.686	0.3714
MINIMUM :	0.0260	0.201	1.5550	0.0760	0.052	0.312	0.0625
RANGE :	0.0500	0.935	3.0954	0.7240	0.048	2.374	0.3089
ARITH. MEAN :	0.0479	0.608	2.6565	0.4940	0.077	1.477	0.1599
ARITH. STD. DEV :	0.0212	0.444	1.3850	0.3099	0.020	1.164	0.1457
GEOM. MEAN :	0.0444	0.479	2.4274	0.3662	0.075	1.059	0.1206
GEOM. STD. DEV. :	0.4484	0.829	0.4750	1.0710	0.271	1.022	0.8395
1ST QUARTILE :	0.0327	0.242	1.7377	0.2720	0.064	0.490	0.0635
2ND QUARTILE :	0.0447	0.548	2.2102	0.5500	0.077	1.455	0.1029
3RD QUARTILE :	0.0630	0.975	3.5752	0.7160	0.089	2.465	0.2563

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : COLDWATER/CUMULATIVE PRECIP. #12

PERIOD OF REPORT : AUG 31, 81 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	4.00000
MAXIMUM	:	0.03040
MINIMUM	:	0.00260
RANGE	:	0.02780
ARITH. MEAN	:	0.01720
ARITH. STD. DEV	:	0.01151
GEOM. MEAN	:	0.01257
GEOM. STD. DEV.	:	1.08490
1ST QUARTILE	:	0.00920
2ND QUARTILE	:	0.01790
3RD QUARTILE	:	0.02520

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : DALHOUSIE MILLS/CUMULATIVE PRECIP. #16

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	9.0000	12.0000	11.00	11.000	11.000	11.000
MAXIMUM :	149.0	11.8523	15.4940	596.90	54.900	61.750	22.862
MINIMUM :	21.2	0.7793	0.0000	55.12	14.237	8.056	6.300
RANGE :	127.8	11.0731	15.4940	541.78	40.663	53.694	16.562
ARITH. MEAN :	82.3	4.6161	5.9921	252.47	36.574	25.979	15.142
ARITH. STD. DEV :	34.9	3.2176	3.9946	152.52	11.871	15.787	5.435
GEOM. MEAN :	74.4	3.6827	4.9402	205.37	34.506	22.153	14.083
GEOM. STD. DEV. :	0.5	0.7637	0.5407	0.74	0.380	0.595	0.424
1ST QUARTILE :	58.4	2.5494	2.9989	108.35	26.784	12.964	9.625
2ND QUARTILE :	78.5	3.9571	6.4295	234.80	34.465	19.590	13.699
3RD QUARTILE :	100.2	4.4565	7.0585	306.70	44.624	34.164	19.757

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DALHOUSIE MILLS/CUMULATIVE PRECIP. #16

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	10.000	11.000	9.000	8.000	10.000	10.0000	11.0000
MAXIMUM :	151.980	6.475	12.700	13.916	54.610	13.7080	0.8288
MINIMUM :	7.420	0.700	1.696	3.500	6.318	0.0848	0.0274
RANGE :	144.560	5.775	11.004	10.416	48.292	13.6232	0.8013
ARITH. MEAN :	51.216	3.235	4.632	8.106	25.464	3.0584	0.3375
ARITH. STD. DEV :	44.403	1.908	3.326	4.180	15.487	4.2554	0.2277
GEOM. MEAN :	36.758	2.579	3.890	7.114	20.918	1.2561	0.2369
GEOM. STD. DEV. :	0.893	0.782	0.597	0.560	0.701	1.5409	1.0779
1ST QUARTILE :	19.634	1.106	2.498	4.195	9.844	0.3226	0.1225
2ND QUARTILE :	36.680	3.430	3.503	7.767	23.633	1.6285	0.2820
3RD QUARTILE :	55.632	4.428	4.550	11.754	32.806	2.6312	0.4610

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DALHOUSIE MILLS/CUMULATIVE PRECIP. #16

PERIOD OF REPORT : DEC 31. 80 TO JAN 5.82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	11.0000	9.000	9.0000	10.0000	11.000	9.000	9.0000
MAXIMUM :	0.0950	1.752	22.1497	1.0430	0.149	16.721	1.0764
MINIMUM :	0.0259	0.383	1.7150	0.3800	0.052	0.687	0.1475
RANGE :	0.0691	1.369	20.4347	0.6630	0.097	16.034	0.9289
ARITH. MEAN :	0.0515	0.859	5.4842	0.6227	0.088	3.642	0.3986
ARITH. STD. DEV :	0.0221	0.391	6.3873	0.2069	0.031	5.106	0.3285
GEOM. MEAN :	0.0473	0.792	3.9094	0.5950	0.083	2.089	0.3071
GEOM. STD. DEV. :	0.4332	0.422	0.7624	0.3123	0.339	1.010	0.7368
1ST QUARTILE :	0.0292	0.624	2.1993	0.4781	0.058	0.981	0.1671
2ND QUARTILE :	0.0466	0.738	3.2869	0.5544	0.078	1.493	0.2057
3RD QUARTILE :	0.0667	0.902	4.3865	0.7021	0.100	2.996	0.4184

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DALHOUSIE MILLS/CUMULATIVE PRECIP. #16

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	9.00000
MAXIMUM	:	0.07600
MINIMUM	:	0.00549
RANGE	:	0.07051
ARITH. MEAN	:	0.02510
ARITH. STD. DEV	:	0.02684
GEOM. MEAN	:	0.01652
GEOM. STD. DEV.	:	0.91700
1ST QUARTILE	:	0.00807
2ND QUARTILE	:	0.01335
3RD QUARTILE	:	0.01710

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DORION/CUMULATIVE PRECIP.

#31

PERIOD OF REPORT : DEC 28, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	12.0000	11.0000	12.00	12.000	12.000	12.000
MAXIMUM :	165.0	4.5445	9.2070	239.25	31.464	36.300	13.200
MINIMUM :	6.4	0.0377	0.4890	10.88	3.008	2.240	0.135
RANGE :	158.6	4.5068	8.7180	228.37	28.456	34.060	13.065
ARITH. MEAN :	53.5	1.6441	3.2968	90.59	16.624	9.870	3.431
ARITH. STD. DEV :	42.6	1.1907	2.4954	67.56	9.576	10.371	3.538
GEOM. MEAN :	40.3	1.0695	2.4442	66.58	13.186	6.452	2.080
GEOM. STD. DEV. :	0.8	1.2741	0.8948	0.89	0.805	0.931	1.186
1ST QUARTILE :	32.1	0.8715	1.1707	37.88	8.699	2.870	0.970
2ND QUARTILE :	42.1	1.6839	2.8215	72.32	17.025	5.355	2.717
3RD QUARTILE :	56.3	1.9791	3.5640	137.62	21.621	15.232	3.932

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : DORION/CUMULATIVE PRECIP.

#31

PERIOD OF REPORT : DEC 28, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES :	11.000	12.000	12.000	12.000	12.000	11.0000	10.0000
MAXIMUM :	57.750	4.950	8.250	11.550	34.480	3.2640	0.3300
MINIMUM :	8.400	0.134	0.064	0.576	1.485	0.1200	0.0200
RANGE :	49.350	4.816	8.186	10.974	32.995	3.1440	0.3100
ARITH. MEAN :	25.159	1.382	1.899	2.414	15.244	1.3852	0.1163
ARITH. STD. DEV :	16.247	1.458	2.762	2.985	10.276	1.3430	0.1044
GEOM. MEAN :	20.689	0.805	0.813	1.652	11.726	0.7188	0.0787
GEOM. STD. DEV. :	0.664	1.148	1.373	0.810	0.850	1.3119	0.9635
1ST QUARTILE :	10.773	0.387	0.416	0.947	8.345	0.2054	0.0282
2ND QUARTILE :	17.320	0.747	0.538	1.503	10.437	0.4225	0.0815
3RD QUARTILE :	34.628	2.175	1.887	2.515	23.478	2.8262	0.1587

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : DORION/CUMULATIVE PRECIP.

#31

PERIOD OF REPORT : DEC 28, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	10.0000	9.000	9.0000	10.0000	10.000	9.000	9.0000
MAXIMUM :	0.0825	0.846	7.2643	0.6325	0.165	8.969	1.1802
MINIMUM :	0.0135	0.132	0.5957	0.0276	0.027	0.195	0.0569
RANGE :	0.0690	0.714	6.6686	0.6049	0.138	8.775	1.1232
ARITH. MEAN :	0.0311	0.448	2.8135	0.2631	0.062	2.383	0.2639
ARITH. STD. DEV :	0.0207	0.281	2.4443	0.1562	0.041	2.985	0.3550
GEOM. MEAN :	0.0269	0.359	1.9104	0.2128	0.054	1.278	0.1608
GEOM. STD. DEV. :	0.5265	0.754	0.9645	0.8116	0.526	1.184	0.9562
1ST QUARTILE :	0.0193	0.148	0.7436	0.1733	0.039	0.576	0.0668
2ND QUARTILE :	0.0242	0.384	1.3393	0.2508	0.048	1.016	0.1397
3RD QUARTILE :	0.0282	0.590	3.8355	0.2965	0.056	1.659	0.1925

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DORION/CUMULATIVE PRECIP.

#31

PERIOD OF REPORT : DEC 28, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	10.00000
MAXIMUM	:	0.02155
MINIMUM	:	0.00268
RANGE	:	0.01886
ARITH. MEAN	:	0.00797
ARITH. STD. DEV	:	0.00715
GEOM. MEAN	:	0.00590
GEOM. STD. DEV.	:	0.78114
1ST QUARTILE	:	0.00282
2ND QUARTILE	:	0.00475
3RD QUARTILE	:	0.00812

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DORSET/CUMULATIVE PRECIP.

#20

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
	MM	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	12.0	12.0000	11.0000	11.00	11.000	12.000	10.000
MAXIMUM :	185.0	13.4642	18.2160	804.75	94.350	62.050	16.800
MINIMUM :	24.0	1.2507	2.2960	69.60	13.440	3.840	3.240
RANGE :	161.0	12.2135	15.9200	735.15	80.910	58.210	13.560
ARITH. MEAN :	79.8	5.2548	8.5287	299.65	42.192	19.881	11.174
ARITH. STD. DEV :	42.9	3.7126	5.1613	240.10	23.397	17.939	4.300
GEOM. MEAN :	69.6	4.2330	7.2021	224.42	36.341	13.873	10.131
GEOM. STD. DEV. :	0.6	0.6959	0.6286	0.81	0.594	0.896	0.519
1ST QUARTILE :	55.0	2.4724	3.9572	109.25	19.280	7.540	6.990
2ND QUARTILE :	79.5	4.5397	7.4672	158.90	39.480	13.620	11.845
3RD QUARTILE :	91.0	5.8466	9.1065	373.72	54.240	29.485	14.015

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : DORSET/CUMULATIVE PRECIP.

#20

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	11.000	12.000	12.000	12.000	10.000	12.0000	11.0000
MAXIMUM :	138.750	10.200	11.480	8.500	111.000	6.2900	0.8730
MINIMUM :	8.880	0.202	0.240	1.120	7.152	0.1200	0.0390
RANGE :	129.870	9.997	11.240	7.380	103.848	6.1700	0.8340
ARITH. MEAN :	46.505	3.168	3.207	3.940	36.784	1.0567	0.3380
ARITH. STD. DEV. :	37.263	3.361	3.362	2.138	32.068	1.7035	0.3207
GEOM. MEAN :	35.096	1.682	1.896	3.378	26.044	0.5397	0.2161
GEOM. STD. DEV. :	0.808	1.276	1.129	0.609	0.899	1.1072	1.0307
1ST QUARTILE :	16.220	0.530	0.815	2.010	10.920	0.2530	0.0830
2ND QUARTILE :	36.790	1.900	1.920	3.740	27.101	0.4280	0.2010
3RD QUARTILE :	62.980	4.995	4.340	5.385	51.160	1.0920	0.5040

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : DORSET/CUMULATIVE PRECIP.

#20

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	11.0000	10.000	10.0000	11.0000	11.000	10.000	9.0000
MAXIMUM :	0.0970	1.005	21.9980	1.1100	0.185	19.949	0.2640
MINIMUM :	0.0140	0.233	0.6998	0.1680	0.024	0.623	0.0620
RANGE :	0.0830	0.772	21.2982	0.9420	0.161	19.327	0.2020
ARITH. MEAN :	0.0582	0.570	5.7267	0.5250	0.082	4.027	0.1457
ARITH. STD. DEV :	0.0263	0.260	6.4543	0.2741	0.044	5.884	0.0733
GEOM. MEAN :	0.0516	0.519	3.3817	0.4588	0.071	2.105	0.1297
GEOM. STD. DEV. :	0.5601	0.458	1.0985	0.5687	0.593	1.116	0.5172
1ST QUARTILE :	0.0370	0.362	1.3841	0.2540	0.040	0.833	0.0843
2ND QUARTILE :	0.0500	0.555	3.7045	0.5010	0.079	1.463	0.1102
3RD QUARTILE :	0.0800	0.607	6.9097	0.6030	0.091	4.322	0.1825

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DORSET/CUMULATIVE PRECIP.

#20

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	11.00000
MAXIMUM	:	0.05820
MINIMUM	:	0.00240
RANGE	:	0.05580
ARITH. MEAN	:	0.01285
ARITH. STD. DEV	:	0.01633
GEOM. MEAN	:	0.00762
GEOM. STD. DEV.	:	1.01389
1ST QUARTILE	:	0.00325
2ND QUARTILE	:	0.00417
3RD QUARTILE	:	0.01525

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : EAR FALL'S/CUMULATIVE PRECIP.

#35

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	7.0000	6.0000	8.00	8.000	6.000	8.000
MAXIMUM :	115.0	1.0498	3.5854	91.00	16.500	13.500	10.044
MINIMUM :	6.3	0.0740	1.0721	15.75	6.075	2.475	0.243
RANGE :	108.7	0.9758	2.5133	75.25	10.425	11.025	9.800
ARITH. MEAN :	43.9	0.5202	2.1981	55.34	10.329	7.774	5.610
ARITH. STD. DEV :	33.9	0.2839	0.9443	24.34	3.370	4.045	3.457
GEOM. MEAN :	32.4	0.4249	2.0231	49.54	9.864	6.781	3.867
GEOM. STD. DEV. :	0.9	0.8194	0.4565	0.55	0.325	0.609	1.215
1ST QUARTILE :	18.4	0.2703	1.2066	42.52	8.008	3.785	3.170
2ND QUARTILE :	34.3	0.5024	2.1402	49.72	9.838	7.185	5.531
3RD QUARTILE :	62.5	0.5232	2.5725	75.75	12.181	9.600	8.595

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : EAR FALL'S/CUMULATIVE PRECIP. #35

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	6.000	8.000	7.000	7.000	8.000	7.0000	5.0000
MAXIMUM :	45.000	14.285	10.010	7.062	28.000	8.1900	3.0495
MINIMUM :	5.625	0.225	0.675	0.500	4.050	0.1575	0.0728
RANGE :	39.375	14.060	9.335	6.562	23.950	8.0325	2.9767
ARITH. MEAN :	22.521	2.906	3.300	2.710	16.436	2.4080	0.7839
ARITH. STD. DEV. :	16.743	4.647	3.343	2.770	8.939	2.8536	1.2796
GEOM. MEAN :	17.201	1.394	2.215	1.741	13.630	1.2857	0.2859
GEOM. STD. DEV. :	0.840	1.244	0.952	1.006	0.724	1.2932	1.5316
1ST QUARTILE :	6.816	0.864	0.824	0.614	9.131	0.3453	0.0814
2ND QUARTILE :	17.623	1.480	1.596	1.405	17.012	1.1607	0.1360
3RD QUARTILE :	29.878	2.022	4.125	3.935	23.574	2.8269	0.3535

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : EAR FALL'S/CUMULATIVE PRECIP. #35

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	5.0000	5.000	3.0000	5.0000	5.000	3.000	5.0000
MAXIMUM :	0.7280	0.863	4.7611	0.7500	0.160	4.484	0.7598
MINIMUM :	0.0112	0.112	0.6072	0.1575	0.022	0.317	0.0670
RANGE :	0.7168	0.750	4.1540	0.5925	0.138	4.166	0.6928
ARITH. MEAN :	0.1718	0.484	2.3480	0.3311	0.077	2.027	0.3374
ARITH. STD. DEV :	0.3116	0.325	2.1570	0.2383	0.054	2.181	0.2804
GEOM. MEAN :	0.0514	0.380	1.6920	0.2828	0.062	1.221	0.2405
GEOM. STD. DEV. :	1.6249	0.846	1.0298	0.5855	0.774	1.325	0.9793
1ST QUARTILE :	0.0147	0.179	*****	0.1879	0.029	*****	0.0951
2ND QUARTILE :	0.0278	0.337	*****	0.2376	0.056	*****	0.2023
3RD QUARTILE :	0.0508	0.599	*****	0.2649	0.083	*****	0.3684

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : EAR FALL'S/CUMULATIVE PRECIP. #35

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	5.00000
MAXIMUM	:	0.01125
MINIMUM	:	0.00182
RANGE	:	0.00943
ARITH. MEAN	:	0.00658
ARITH. STD. DEV	:	0.00397
GEOM. MEAN	:	0.00537
GEOM. STD. DEV.	:	0.77010
1ST QUARTILE	:	0.00251
2ND QUARTILE	:	0.00536
3RD QUARTILE	:	0.00830

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : EXP. LAKES AREA/CUMULATIVE PRECIP. #34

PERIOD OF REPORT : OCT 6, 81 TO JAN 5, 82

PAGE : 1

	PRECIP.	FREE H+	TOTAL H+	SULPHATE	NITRATE	CALCIUM	CHLORIDE
	MM	LAB MG/M**2	TO PH8.3 MG/M**2	MG/M**2	AS N MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	3.0	2.0000	2.0000	2.00	2.000	2.000	2.000
MAXIMUM :	27.1	1.0069	1.8320	51.75	11.270	5.980	0.542
MINIMUM :	19.0	0.5269	1.3110	40.65	7.046	3.794	0.460
RANGE :	8.1	0.4800	0.5210	11.10	4.224	2.186	0.082
ARITH. MEAN :	23.0	0.7669	1.5715	46.20	9.158	4.887	0.501
ARITH. STD. DEV :	4.1	0.3394	0.3684	7.85	2.987	1.546	0.058
GEOM. MEAN :	22.8	0.7284	1.5497	45.87	8.911	4.763	0.499
GEOM. STD. DEV. :	0.2	0.4579	0.2366	0.17	0.332	0.322	0.116
1ST QUARTILE :	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : EXP. LAKES AREA/CUMULATIVE PRECIP. #34

PERIOD OF REPORT : OCT 6, 81 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	2.000	2.000	2.000	2.000	2.000	2.0000	2.0000
MAXIMUM :	16.560	0.920	0.542	0.690	14.720	0.4600	0.0920
MINIMUM :	7.859	0.271	0.460	0.542	6.612	0.2710	0.0542
RANGE :	8.701	0.649	0.082	0.148	8.108	0.1890	0.0378
ARITH. MEAN :	12.209	0.595	0.501	0.616	10.666	0.3655	0.0731
ARITH. STD. DEV :	6.153	0.459	0.058	0.105	5.733	0.1336	0.0267
GEOM. MEAN :	11.408	0.499	0.499	0.612	9.866	0.3531	0.0706
GEOM. STD. DEV. :	0.527	0.864	0.116	0.171	0.566	0.3741	0.3741
1ST QUARTILE :	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : EXP. LAKES AREA/CUMULATIVE PRECIP. #34

PERIOD OF REPORT : OCT 6, 81 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINIUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	2.0000	2.000	2.0000	2.0000	2.000	2.000	2.0000
MAXIMUM :	0.0135	0.350	1.6654	0.1897	0.027	0.739	0.2495
MINIMUM :	0.0115	0.111	0.6214	0.0690	0.023	0.319	0.0649
RANGE :	0.0021	0.239	1.0440	0.1207	0.004	0.421	0.1847
ARITH. MEAN :	0.0125	0.231	1.1434	0.1293	0.025	0.529	0.1572
ARITH. STD. DEV :	0.0014	0.169	0.7382	0.0853	0.003	0.297	0.1306
GEOM. MEAN :	0.0125	0.197	1.0173	0.1144	0.025	0.485	0.1272
GEOM. STD. DEV. :	0.1160	0.810	0.6971	0.7151	0.116	0.595	0.9525
1ST QUARTILE :	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : EXP. LAKES AREA/CUMULATIVE PRECIP. #34

PERIOD OF REPORT : OCT 6, 81 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	2.00000
MAXIMUM	:	0.00460
MINIMUM	:	0.00271
RANGE	:	0.00189
ARITH. MEAN	:	0.00365
ARITH. STD. DEV	:	0.00134
GEOM. MEAN	:	0.00353
GEOM. STD. DEV.	:	0.37414
1ST QUARTILE	:	*****
2ND QUARTILE	:	*****
3RD QUARTILE	:	*****

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GOLDEN LAKE/CUMULATIVE PRECIP. #17

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
	MM	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	12.0	12.0000	12.0000	12.00	12.000	12.000	12.000
MAXIMUM :	140.0	11.1991	15.0480	591.60	59.160	60.146	47.388
MINIMUM :	20.6	1.8787	2.6533	36.05	9.860	3.090	1.760
RANGE :	119.4	9.3203	12.3947	555.55	49.300	57.056	45.628
ARITH. MEAN :	73.2	4.9818	7.7591	258.12	35.416	19.029	13.506
ARITH. STD. DEV :	34.6	2.9563	4.0329	180.50	14.315	20.723	12.728
GEOM. MEAN :	65.0	4.3304	6.8583	199.26	32.098	11.830	8.950
GEOM. STD. DEV. :	0.5	0.5380	0.5253	0.80	0.504	0.985	1.006
1ST QUARTILE :	52.0	3.1333	5.0444	124.56	22.860	6.136	4.066
2ND QUARTILE :	66.9	3.9795	6.8185	177.14	37.237	8.544	12.131
3RD QUARTILE :	94.1	6.1147	10.2601	394.10	45.400	26.526	16.674

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GOLDEN LAKE/CUMULATIVE PRECIP. #17

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	11.000	12.000	12.000	11.000	12.000	12.0000	10.0000
MAXIMUM :	77.544	12.818	34.510	20.706	77.894	15.9732	0.9920
MINIMUM :	5.562	0.300	0.303	0.340	1.854	0.0103	0.0340
RANGE :	71.982	12.518	34.206	20.366	76.040	15.9629	0.9580
ARITH. MEAN :	34.828	3.583	6.981	5.522	26.380	2.7608	0.2690
ARITH. STD. DEV :	25.286	3.954	11.975	5.753	22.550	4.6634	0.2774
GEOM. MEAN :	25.951	1.952	2.245	3.307	17.763	0.7017	0.1712
GEOM. STD. DEV. :	0.856	1.236	1.512	1.165	1.024	1.9808	1.0662
1ST QUARTILE :	13.240	0.645	0.788	1.115	11.251	0.2534	0.0493
2ND QUARTILE :	18.236	2.553	1.819	3.200	13.646	0.4057	0.2414
3RD QUARTILE :	56.800	4.154	4.590	7.062	40.868	3.1622	0.2720

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GOLDEN LAKE/CUMULATIVE PRECIP. #17

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	10.0000	9.000	9.0000	10.0000	10.000	9.000	9.0000
MAXIMUM :	0.0700	1.593	6.4555	0.9600	0.144	4.589	0.6178
MINIMUM :	0.0170	0.113	0.9061	0.3400	0.034	0.257	0.0395
RANGE :	0.0530	1.480	5.5494	0.6200	0.110	4.333	0.5782
ARITH. MEAN :	0.0402	0.724	2.2381	0.5789	0.083	1.364	0.2648
ARITH. STD. DEV. :	0.0155	0.418	1.8723	0.2247	0.039	1.410	0.1871
GEOM. MEAN :	0.0375	0.596	1.7422	0.5433	0.075	0.920	0.2012
GEOM. STD. DEV. :	0.3982	0.749	0.7142	0.3696	0.484	0.912	0.8597
1ST QUARTILE :	0.0302	0.442	0.9383	0.3921	0.052	0.473	0.1020
2ND QUARTILE :	0.0373	0.679	1.2889	0.4832	0.070	0.704	0.2290
3RD QUARTILE :	0.0444	0.847	2.2228	0.6800	0.105	1.238	0.2928

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GOLDEN LAKE/CUMULATIVE PRECIP. #17

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	10.00000
MAXIMUM	:	0.06462
MINIMUM	:	0.00340
RANGE	:	0.06122
ARITH. MEAN	:	0.01709
ARITH. STD. DEV	:	0.01808
GEOM. MEAN	:	0.01164
GEOM. STD. DEV.	:	0.90240
1ST QUARTILE	:	0.00493
2ND QUARTILE	:	0.01260
3RD QUARTILE	:	0.01826

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOWGANDA/CUMULATIVE PRECIP.

#25

PERIOD OF REPORT : DEC 31, 80 TO JAN 8, 82

PAGE : 1

	PRECIP.	FREE H+	TOTAL H+	SULPHATE	NITRATE	CALCIUM	CHLORIDE
	MM	LAB MG/M**2	TO PH8.3 MG/M**2	MG/M**2	AS N MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	12.0	12.0000	10.0000	11.00	12.000	10.000	12.000
MAXIMUM :	156.0	6.7514	10.1712	780.00	49.920	60.000	12.480
MINIMUM :	14.0	1.0843	2.4064	38.50	9.800	2.940	0.920
RANGE :	142.0	5.6670	7.7648	741.50	40.120	57.060	11.560
ARITH. MEAN :	59.5	2.5788	5.6796	203.23	19.205	13.396	5.502
ARITH. STD. DEV :	39.4	1.6069	2.9170	215.43	11.166	17.282	3.368
GEOM. MEAN :	49.0	2.2161	5.0675	134.54	17.113	8.441	4.468
GEOM. STD. DEV. :	0.7	0.5621	0.4988	0.94	0.472	0.916	0.733
1ST QUARTILE :	29.5	1.3906	3.5276	51.72	12.180	3.760	2.820
2ND QUARTILE :	50.0	2.3241	4.3811	124.60	15.300	7.810	5.250
3RD QUARTILE :	84.5	3.2514	7.4539	255.17	23.580	10.470	7.270

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GOWGANDA/CUMULATIVE PRECIP.

#25

PERIOD OF REPORT : DEC 31, 80 TO JAN 8, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	9.000	10.000	9.000	10.000	11.000	10.0000	8.0000
MAXIMUM :	52.800	6.800	49.920	6.400	37.600	39.0000	1.0400
MINIMUM :	9.600	0.245	0.460	0.445	4.144	0.2040	0.0255
RANGE :	43.200	6.555	49.460	5.955	33.456	38.7960	1.0145
ARITH. MEAN :	29.588	2.246	7.396	3.559	17.237	5.0574	0.3244
ARITH. STD. DEV :	14.136	2.403	16.047	1.978	12.148	11.9822	0.3431
GEOM. MEAN :	25.916	1.318	2.266	2.870	13.116	1.2843	0.1914
GEOM. STD. DEV. :	0.588	1.119	1.385	0.804	0.811	1.4928	1.1844
1ST QUARTILE :	14.440	0.485	0.990	1.855	5.324	0.4500	0.1055
2ND QUARTILE :	32.300	1.420	1.275	3.395	10.262	0.9685	0.1970
3RD QUARTILE :	35.180	2.362	2.625	4.730	26.325	1.8920	0.4625

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : GOWGANDA/CUMULATIVE PRECIP.

#25

PERIOD OF REPORT : DEC 31, 80 TO JAN 8, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	9.0000	8.000	7.0000	8.0000	9.000	7.000	9.0000
MAXIMUM :	0.1080	1.417	17.1280	1.0920	0.156	16.224	0.4059
MINIMUM :	0.0160	0.213	1.0950	0.0400	0.027	0.352	0.0576
RANGE :	0.0920	1.204	16.0329	1.0520	0.129	15.872	0.3483
ARITH. MEAN :	0.0507	0.826	5.4123	0.4305	0.065	4.187	0.1985
ARITH. STD. DEV :	0.0335	0.423	5.9124	0.3469	0.040	5.620	0.1078
GEOM. MEAN :	0.0413	0.711	3.3615	0.2921	0.056	2.041	0.1693
GEOM. STD. DEV. :	0.6911	0.637	1.0349	1.0650	0.540	1.331	0.6371
1ST QUARTILE :	0.0230	0.480	1.2406	0.1535	0.037	0.430	0.0888
2ND QUARTILE :	0.0327	0.831	2.0022	0.3900	0.050	1.750	0.2131
3RD QUARTILE :	0.0660	1.179	7.1363	0.6125	0.067	4.364	0.2331

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GOWGANDA/CUMULATIVE PRECIP. #25

PERIOD OF REPORT : DEC 31, 80 TO JAN 8, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	9.00000
MAXIMUM	:	0.04450
MINIMUM	:	0.00255
RANGE	:	0.04195
ARITH. MEAN	:	0.02144
ARITH. STD. DEV	:	0.01488
GEOM. MEAN	:	0.01489
GEOM. STD. DEV.	:	1.05214
1ST QUARTILE	:	0.00650
2ND QUARTILE	:	0.01845
3RD QUARTILE	:	0.03180

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIJS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : HURON PARK/CUMULATIVE PRECIP. #06

PERIOD OF REPORT : OCT 2, 81 TO DEC 31, 81

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	3.0	1.0000	1.0000	1.00	1.000	1.000	1.000
MAXIMUM :	121.3	4.9415	9.1460	303.25	48.520	29.112	9.704
MINIMUM :	65.9	4.9415	9.1460	303.25	48.520	29.112	9.704
RANGE :	55.4	0.0000	0.0000	0.00	0.000	0.000	0.000
ARITH. MEAN :	100.2	*****	*****	*****	*****	*****	*****
ARITH. STD. DEV :	30.0	*****	*****	*****	*****	*****	*****
GEOM. MEAN :	96.8	*****	*****	*****	*****	*****	*****
GEOM. STD. DEV. :	0.3	*****	*****	*****	*****	*****	*****
1ST QUARTILE :	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : HURON PARK/CUMULATIVE PRECIP.

#06

PERIOD OF REPORT : OCT 2, 81 TO DEC 31, 81

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES :	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000
MAXIMUM :	44.881	3.032	2.426	2.426	43.183	0.9704	0.2426
MINIMUM :	44.881	3.032	2.426	2.426	43.183	0.9704	0.2426
RANGE :	0.000	0.000	0.000	0.000	0.000	0.0000	0.0000
ARITH. MEAN :	*****	*****	*****	*****	*****	*****	*****
ARITH. STD. DEV :	*****	*****	*****	*****	*****	*****	*****
GEOM. MEAN :	*****	*****	*****	*****	*****	*****	*****
GEOM. STD. DEV. :	*****	*****	*****	*****	*****	*****	*****
1ST QUARTILE :	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : HURON PARK/CUMULATIVE PRECIP.

#06

PERIOD OF REPORT : OCT 2, 81 TO DEC 31, 81

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	1.0000	1.000	1.0000	1.0000	1.000	0.000	1.0000
MAXIMUM :	0.0606	0.773	3.4704	0.8491	0.121	*****	1.3949
MINIMUM :	0.0606	0.773	3.4704	0.8491	0.121	*****	1.3949
RANGE :	0.0000	0.000	0.0000	0.0000	0.000	*****	0.0000
ARITH. MEAN :	*****	*****	*****	*****	*****	*****	*****
ARITH. STD. DEV :	*****	*****	*****	*****	*****	*****	*****
GEOM. MEAN :	*****	*****	*****	*****	*****	*****	*****
GEOM. STD. DEV. :	*****	*****	*****	*****	*****	*****	*****
1ST QUARTILE :	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : HURON PARK/CUMULATIVE PRECIP. #06

PERIOD OF REPORT : OCT 2, 81 TO DEC 31, 81

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	1.00000
MAXIMUM	:	0.01213
MINIMUM	:	0.01213
RANGE	:	0.00000
ARITH. MEAN	:	*****
ARITH. STD. DEV	:	*****
GEOM. MEAN	:	*****
GEOM. STD. DEV.	:	*****
1ST QUARTILE	:	*****
2ND QUARTILE	:	*****
3RD QUARTILE	:	*****

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : KALADAR/CUMULATIVE PRECIP.

#14

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	11.0000	10.0000	12.00	12.000	11.000	12.000
MAXIMUM :	172.0	14.9806	20.2616	705.20	89.440	78.300	54.296
MINIMUM :	17.8	0.8021	2.8302	19.32	12.368	3.092	8.640
RANGE :	154.2	14.1784	17.4314	685.87	77.072	75.208	45.656
ARITH. MEAN :	86.6	5.6204	8.7897	314.21	44.639	24.109	19.142
ARITH. STD. DEV :	41.1	4.4207	5.6783	209.56	20.533	21.550	14.237
GEOM. MEAN :	75.4	4.0368	7.1834	215.63	39.681	16.428	15.833
GEOM. STD. DEV. :	0.6	0.9159	0.6915	1.11	0.545	0.980	0.598
1ST QUARTILE :	61.6	1.6057	3.1460	170.69	30.430	5.924	10.450
2ND QUARTILE :	87.1	4.4490	8.9366	284.40	46.113	17.610	12.930
3RD QUARTILE :	109.0	7.1364	9.9518	464.35	54.500	32.651	24.316

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : KALADAR/CUMULATIVE PRECIP.

#14

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	10.000	11.000	12.000	12.000	12.000	10.0000	7.0000
MAXIMUM :	138.180	9.000	22.500	37.020	96.040	8.6240	0.5160
MINIMUM :	4.094	0.267	0.356	1.546	3.346	0.0712	0.0700
RANGE :	134.086	8.733	22.144	35.474	92.694	8.5528	0.4460
ARITH. MEAN :	49.709	3.656	6.195	11.193	38.291	2.4850	0.2724
ARITH. STD. DEV :	36.244	3.123	7.159	12.017	26.627	2.9178	0.1662
GEOM. MEAN :	37.330	2.125	3.294	6.676	28.551	1.1633	0.2245
GEOM. STD. DEV. :	0.927	1.264	1.221	1.061	0.915	1.4481	0.7136
1ST QUARTILE :	29.369	0.463	1.473	2.960	17.892	0.4666	0.0967
2ND QUARTILE :	40.860	2.609	2.990	5.890	33.358	1.1525	0.2085
3RD QUARTILE :	53.012	6.000	9.800	17.723	51.727	3.4050	0.3902

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : KALADAR/CUMULATIVE PRECIP.

#14

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	7.0000	6.000	6.0000	7.0000	7.000	7.000	6.0000
MAXIMUM :	0.1234	1.118	9.7399	1.3760	0.172	8.980	0.9025
MINIMUM :	0.0175	0.177	2.2054	0.2815	0.035	0.548	0.1469
RANGE :	0.1059	0.941	7.5345	1.0945	0.137	8.431	0.7556
ARITH. MEAN :	0.0568	0.693	4.0319	0.8104	0.096	2.801	0.3732
ARITH. STD. DEV :	0.0370	0.365	2.8383	0.4018	0.047	2.853	0.3043
GEOM. MEAN :	0.0472	0.593	3.4966	0.7112	0.085	1.978	0.2920
GEOM. STD. DEV. :	0.6701	0.675	0.5302	0.5841	0.544	0.878	0.7392
1ST QUARTILE :	0.0228	0.351	2.4159	0.3507	0.046	0.815	0.1513
2ND QUARTILE :	0.0437	0.614	3.0812	0.7540	0.087	1.675	0.2279
3RD QUARTILE :	0.0705	0.881	3.4458	1.0436	0.117	2.825	0.4037

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : KALADAR/CUMULATIVE PRECIP.

#14

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	7.00000
MAXIMUM	:	0.01689
MINIMUM	:	0.00540
RANGE	:	0.01149
ARITH. MEAN	:	0.00932
ARITH. STD. DEV	:	0.00396
GEOM. MEAN	:	0.00869
GEOM. STD. DEV.	:	0.39673
1ST QUARTILE	:	0.00578
2ND QUARTILE	:	0.00765
3RD QUARTILE	:	0.01075

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : KILLARNEY/CUMULATIVE PRECIP.

#23

PERIOD OF REPORT : JAN 5, 81 TO JAN 5, 82

PAGE : 1

	PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
	MM	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	12.0	12.0000	11.0000	11.00	10.000	12.000	10.000
MAXIMUM :	110.0	10.8224	14.0592	611.05	56.560	43.350	13.286
MINIMUM :	19.0	0.6741	1.4630	64.80	13.110	2.160	1.000
RANGE :	91.0	10.1482	12.5962	546.25	43.450	41.190	12.286
ARITH. MEAN :	56.8	3.9107	6.1083	210.26	31.490	15.641	6.574
ARITH. STD. DEV :	26.6	2.7938	3.6466	168.29	14.438	12.511	4.089
GEOM. MEAN :	51.2	3.1662	5.2083	165.31	28.525	11.451	5.195
GEOM. STD. DEV. :	0.5	0.6974	0.6102	0.70	0.476	0.867	0.810
1ST QUARTILE :	41.0	2.3571	3.4866	86.57	19.350	6.960	3.030
2ND QUARTILE :	52.6	2.9258	5.0371	136.40	27.735	11.200	5.780
3RD QUARTILE :	64.0	4.4228	6.8992	251.88	40.260	23.390	7.890

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : KILLARNEY/CUMULATIVE PRECIP.

#23

PERIOD OF REPORT : JAN 5, 81 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	9.000	12.000	11.000	9.000	12.000	9.0000	8.0000
MAXIMUM :	90.750	7.140	7.030	5.110	74.740	4.1250	1.0710
MINIMUM :	11.000	0.270	0.500	1.000	7.220	0.1010	0.0500
RANGE :	79.750	6.870	6.530	4.110	67.520	4.0240	1.0210
ARITH. MEAN :	42.291	2.672	2.707	2.778	27.972	0.9180	0.3256
ARITH. STD. DEV :	29.022	2.195	2.306	1.449	19.838	1.3297	0.3398
GEOM. MEAN :	33.561	1.787	1.772	2.433	22.118	0.4633	0.1953
GEOM. STD. DEV. :	0.744	1.026	1.030	0.563	0.732	1.1482	1.1416
1ST QUARTILE :	17.200	0.840	0.580	1.610	12.130	0.2320	0.0580
2ND QUARTILE :	28.500	2.325	1.965	2.090	24.948	0.3150	0.2615
3RD QUARTILE :	53.335	4.267	3.573	3.450	40.692	0.4811	0.4224

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : KILLARNEY/CUMULATIVE PRECIP.

#23

PERIOD OF REPORT : JAN 5, 81 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	8.0000	8.000	5.0000	8.0000	8.000	6.000	7.0000
MAXIMUM :	0.2550	1.491	4.1791	0.6643	0.110	32.441	0.4130
MINIMUM :	0.0250	0.384	0.9120	0.1080	0.050	0.240	0.1206
RANGE :	0.2300	1.107	3.2670	0.5563	0.060	32.201	0.2923
ARITH. MEAN :	0.0853	0.857	2.4722	0.4637	0.067	6.077	0.2736
ARITH. STD. DEV :	0.0749	0.390	1.3755	0.1846	0.024	12.932	0.1015
GEOM. MEAN :	0.0654	0.782	2.1443	0.4140	0.064	1.200	0.2555
GEOM. STD. DEV. :	0.7484	0.462	0.6196	0.5878	0.320	1.757	0.4172
1ST QUARTILE :	0.0410	0.578	1.2530	0.3860	0.051	0.372	0.1677
2ND QUARTILE :	0.0545	0.769	1.8315	0.4495	0.054	0.610	0.2322
3RD QUARTILE :	0.1055	1.144	2.8379	0.6330	0.081	1.349	0.3510

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : KILLARNEY/CUMULATIVE PRECIP. #23

PERIOD OF REPORT : JAN 5, 81 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	8.00000
MAXIMUM	:	0.02044
MINIMUM	:	0.00540
RANGE	:	0.01504
ARITH. MEAN	:	0.01252
ARITH. STD. DEV	:	0.00579
GEOM. MEAN	:	0.01125
GEOM. STD. DEV.	:	0.51472
1ST QUARTILE	:	0.00780
2ND QUARTILE	:	0.01170
3RD QUARTILE	:	0.01765

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MATTAWA/CUMULATIVE PRECIP.

#22

PERIOD OF REPORT : JAN 5, 81 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	10.0000	9.0000	10.00	10.000	10.000	10.000
MAXIMUM :	188.0	11.8620	17.1456	601.60	67.680	70.300	39.550
MINIMUM :	21.0	0.4701	3.7238	54.60	14.070	3.010	4.200
RANGE :	167.0	11.3919	13.4218	547.00	53.610	67.290	35.350
ARITH. MEAN :	79.4	4.8497	8.4464	275.49	32.898	19.787	12.987
ARITH. STD. DEV :	48.2	3.7030	4.8333	199.80	16.274	20.816	11.018
GEOM. MEAN :	66.9	3.4590	7.2757	208.64	29.542	12.678	10.021
GEOM. STD. DEV. :	0.6	0.9633	0.5832	0.83	0.492	0.998	0.727
1ST QUARTILE :	41.4	2.0467	3.9501	90.35	18.160	5.250	5.095
2ND QUARTILE :	67.0	3.2554	5.9887	226.15	29.490	10.950	9.115
3RD QUARTILE :	104.0	7.3579	11.0360	359.27	39.100	23.260	14.130

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MATTAWA/CUMULATIVE PRECIP.

#22

PERIOD OF REPORT : JAN 5, 81 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	9.000	9.000	10.000	9.000	10.000	9.0000	9.0000
MAXIMUM :	88.140	10.450	25.990	11.400	59.032	3.7600	1.3300
MINIMUM :	8.400	0.430	1.680	1.200	4.956	0.0930	0.1200
RANGE :	79.740	10.020	24.310	10.200	54.076	3.6670	1.2100
ARITH. MEAN :	42.828	3.462	6.107	5.846	28.194	1.2830	0.4676
ARITH. STD. DEV. :	29.321	3.419	7.448	3.399	20.865	1.2929	0.4155
GEOM. MEAN :	33.499	2.156	4.007	4.869	20.456	0.6530	0.3364
GEOM. STD. DEV. :	0.786	1.084	0.871	0.694	0.908	1.3833	0.8536
1ST QUARTILE :	19.020	0.800	1.970	3.405	7.917	0.1740	0.1585
2ND QUARTILE :	30.900	2.030	2.895	4.740	25.875	0.5420	0.2450
3RD QUARTILE :	55.055	3.547	5.795	6.610	42.144	1.8880	0.5105

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MATTAWA/CUMULATIVE PRECIP.

#22

PERIOD OF REPORT : JAN 5, 81 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	9.0000	6.000	6.0000	9.0000	9.000	6.000	7.0000
MAXIMUM :	0.3990	1.145	24.9755	1.5820	0.188	24.244	0.4215
MINIMUM :	0.0300	0.303	0.9738	0.2850	0.043	0.241	0.1018
RANGE :	0.3690	0.842	24.0017	1.2970	0.145	24.003	0.3197
ARITH. MEAN :	0.1525	0.672	10.0589	0.5910	0.095	10.424	0.2663
ARITH. STD. DEV :	0.1145	0.331	9.5813	0.4069	0.045	10.341	0.1110
GEOM. MEAN :	0.1161	0.600	6.1445	0.5057	0.087	4.384	0.2427
GEOM. STD. DEV. :	0.8246	0.541	1.1941	0.5564	0.461	1.799	0.4958
1ST QUARTILE :	0.0567	0.320	2.2499	0.2985	0.058	0.896	0.1308
2ND QUARTILE :	0.1210	0.687	6.1481	0.4410	0.083	8.148	0.2595
3RD QUARTILE :	0.1810	0.845	13.3686	0.6105	0.104	16.806	0.3311

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MATTAWA/CUMULATIVE PRECIP.

#22

PERIOD OF REPORT : JAN 5, 81 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	9.00000
MAXIMUM	:	0.09040
MINIMUM	:	0.00370
RANGE	:	0.08670
ARITH. MEAN	:	0.02183
ARITH. STD. DEV	:	0.02697
GEOM. MEAN	:	0.01349
GEOM. STD. DEV.	:	0.99549
1ST QUARTILE	:	0.00567
2ND QUARTILE	:	0.01285
3RD QUARTILE	:	0.01840

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MCKELLAR/CUMULATIVE PRECIP.

#21

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	9.0000	9.0000	9.00	9.000	10.000	9.000
MAXIMUM :	190.0	9.5573	14.6610	607.50	73.206	110.390	40.670
MINIMUM :	30.3	1.2944	2.5060	37.88	8.787	4.242	1.250
RANGE :	159.7	8.2629	12.1550	569.62	64.419	106.148	39.420
ARITH. MEAN :	89.3	4.9913	8.0100	270.30	44.361	24.573	15.411
ARITH. STD. DEV :	49.5	3.0458	4.0605	198.39	25.647	31.422	12.347
GEOM. MEAN :	75.9	4.0203	6.9169	200.92	34.865	15.902	10.319
GEOM. STD. DEV. :	0.6	0.7521	0.6197	0.89	0.833	0.887	1.091
1ST QUARTILE :	37.5	1.8829	4.2535	104.00	15.250	9.570	4.325
2ND QUARTILE :	87.0	4.4649	7.7095	199.65	45.160	12.840	12.975
3RD QUARTILE :	120.6	6.4616	9.3361	319.85	63.120	19.815	18.550

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : MCKELLAR/CUMULATIVE PRECIP.

#21

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	8.000	9.000	9.000	7.000	8.000	9.0000	8.0000
MAXIMUM :	110.390	20.335	28.750	25.564	95.850	4.4156	1.9754
MINIMUM :	23.200	0.240	1.200	1.250	11.211	0.1200	0.0385
RANGE :	87.190	20.095	27.550	24.314	84.639	4.2956	1.9369
ARITH. MEAN :	55.042	4.880	6.424	7.469	39.949	1.3410	0.4280
ARITH. STD. DEV :	34.338	6.470	9.143	8.500	33.943	1.3951	0.6395
GEOM. MEAN :	47.008	2.396	3.388	4.653	29.926	0.7879	0.2172
GEOM. STD. DEV. :	0.590	1.313	1.089	1.037	0.793	1.1683	1.1888
1ST QUARTILE :	29.980	1.242	1.645	1.585	16.475	0.3060	0.1050
2ND QUARTILE :	42.620	1.755	1.835	3.925	25.206	0.6580	0.2100
3RD QUARTILE :	80.775	3.950	4.063	7.848	64.584	1.5875	0.3900

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MCKELLAR/CUMULATIVE PRECIP.

#21

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	8.0000	8.000	8.0000	8.0000	8.000	8.000	8.0000
MAXIMUM :	0.1200	1.578	27.5278	1.0260	0.228	24.239	1.0824
MINIMUM :	0.0385	0.152	0.3050	0.0385	0.040	0.381	0.1858
RANGE :	0.0815	1.425	27.2228	0.9875	0.188	23.858	0.8966
ARITH. MEAN :	0.0796	0.997	6.7825	0.4945	0.111	5.235	0.4516
ARITH. STD. DEV :	0.0325	0.552	8.8896	0.3581	0.057	8.343	0.2864
GEOM. MEAN :	0.0737	0.799	3.2845	0.3475	0.099	2.085	0.3905
GEOM. STD. DEV. :	0.4273	0.820	1.3927	1.0604	0.518	1.369	0.5573
1ST QUARTILE :	0.0552	0.563	1.2977	0.2490	0.073	0.973	0.2525
2ND QUARTILE :	0.0687	1.066	3.8417	0.3543	0.106	1.391	0.4033
3RD QUARTILE :	0.1151	1.492	8.0744	0.8425	0.130	6.265	0.5165

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MCKELLAR/CUMULATIVE PRECIP. #21

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	8.00000
MAXIMUM	:	0.03840
MINIMUM	:	0.00385
RANGE	:	0.03455
ARITH. MEAN	:	0.01878
ARITH. STD. DEV	:	0.01317
GEOM. MEAN	:	0.01449
GEOM. STD. DEV.	:	0.81783
1ST QUARTILE	:	0.00882
2ND QUARTILE	:	0.01375
3RD QUARTILE	:	0.03143

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
API05 - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MERLIN/CUMULATIVE PRECIP.

#02

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	10.0000	11.0000	12.00	12.000	9.000	12.000
MAXIMUM :	141.6	11.1206	15.2880	581.00	74.400	73.470	41.600
MINIMUM :	13.0	0.8394	0.6720	82.55	16.470	17.010	4.800
RANGE :	128.6	10.2812	14.6160	498.45	57.930	56.460	36.800
ARITH. MEAN :	70.3	5.7012	7.8602	333.53	44.795	40.491	16.912
ARITH. STD. DEV :	42.5	3.4377	4.8082	174.82	19.996	19.927	9.643
GEOM. MEAN :	55.9	4.3450	5.8847	279.83	40.023	36.410	14.710
GEOM. STD. DEV. :	0.8	0.9027	0.9495	0.68	0.525	0.490	0.561
1ST QUARTILE :	39.5	1.9709	2.6021	186.00	28.425	25.680	11.110
2ND QUARTILE :	70.0	6.4994	7.9444	343.40	45.700	30.276	15.160
3RD QUARTILE :	90.5	7.0092	10.6843	479.77	63.368	46.613	20.312

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MERLIN/CUMULATIVE PRECIP.

#02

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	11.000	9.000	11.000	11.000	11.000	11.0000	8.0000
MAXIMUM :	84.960	28.800	7.644	27.200	63.720	3.6600	0.5580
MINIMUM :	19.440	3.375	1.500	0.880	10.400	0.2550	0.1350
RANGE :	65.520	25.425	6.144	26.320	53.320	3.4050	0.4230
ARITH. MEAN :	51.282	9.329	4.956	6.871	40.474	1.6119	0.3106
ARITH. STD. DEV. :	20.124	7.807	2.169	7.924	18.583	1.2203	0.1272
GEOM. MEAN :	47.259	7.585	4.389	4.071	35.327	1.1373	0.2888
GEOM. STD. DEV. :	0.446	0.623	0.566	1.074	0.604	0.9625	0.4148
1ST QUARTILE :	32.300	5.632	2.365	1.420	21.580	0.3777	0.2520
2ND QUARTILE :	51.789	5.860	5.200	2.885	37.500	1.4034	0.2781
3RD QUARTILE :	58.120	7.891	6.540	7.940	55.900	2.1050	0.3660

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : MERLIN/CUMULATIVE PRECIP.

#02

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	9.0000	8.000	8.0000	9.0000	9.000	7.000	7.0000
MAXIMUM :	0.2832	0.879	13.7640	1.4000	0.142	12.955	0.7765
MINIMUM :	0.0260	0.297	2.0571	0.3240	0.027	1.581	0.1118
RANGE :	0.2572	0.582	11.7069	1.0760	0.115	11.374	0.6646
ARITH. MEAN :	0.1057	0.602	5.1213	0.6482	0.082	4.361	0.3092
ARITH. STD. DEV :	0.0976	0.182	3.8214	0.3156	0.039	4.013	0.2864
GEOM. MEAN :	0.0731	0.575	4.2171	0.5946	0.073	3.322	0.2238
GEOM. STD. DEV. :	0.8983	0.334	0.6409	0.4260	0.523	0.748	0.8244
1ST QUARTILE :	0.0356	0.519	2.3160	0.4460	0.053	1.606	0.1130
2ND QUARTILE :	0.0502	0.553	4.5545	0.5430	0.070	2.571	0.1509
3RD QUARTILE :	0.1150	0.747	5.7040	0.7060	0.090	4.608	0.4300

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MERLIN/CUMULATIVE PRECIP.

#02

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	9.00000
MAXIMUM	:	0.02800
MINIMUM	:	0.00270
RANGE	:	0.02530
ARITH. MEAN	:	0.01494
ARITH. STD. DEV	:	0.00890
GEOM. MEAN	:	0.01214
GEOM. STD. DEV.	:	0.74989
1ST QUARTILE	:	0.00794
2ND QUARTILE	:	0.01066
3RD QUARTILE	:	0.02130

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MILTON/CUMULATIVE PRECIP.

#10

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	6.0000	11.0000	11.00	11.000	7.000	7.000
MAXIMUM :	117.9	15.5422	18.9111	813.51	86.067	58.500	57.920
MINIMUM :	16.9	1.8746	0.8747	104.78	20.424	29.750	18.000
RANGE :	101.0	13.6676	18.0364	708.73	65.643	28.750	39.920
ARITH. MEAN :	68.2	6.0901	5.9916	323.94	46.006	44.004	25.665
ARITH. STD. DEV :	33.4	4.8765	5.2345	199.74	17.742	10.481	14.565
GEOM. MEAN :	59.6	4.8871	4.2055	277.50	42.801	42.893	23.358
GEOM. STD. DEV. :	0.6	0.7058	0.9226	0.58	0.413	0.247	0.424
1ST QUARTILE :	47.3	2.7575	1.7024	155.20	29.276	31.970	18.024
2ND QUARTILE :	60.7	4.7816	3.9947	289.50	45.057	41.824	19.286
3RD QUARTILE :	99.6	5.8907	8.3937	349.75	52.064	50.969	23.557

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : MILTON/CUMULATIVE PRECIP.

#10

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	9.000	3.000	7.000	9.000	12.000	8.0000	7.0000
MAXIMUM :	106.110	12.138	7.896	38.372	94.500	4.7940	0.8840
MINIMUM :	30.160	7.663	1.420	1.179	8.957	0.0260	0.2556
RANGE :	75.950	4.474	6.476	37.193	85.543	4.7680	0.6284
ARITH. MEAN :	58.258	9.575	3.951	13.338	47.985	2.0121	0.4678
ARITH. STD. DEV :	26.151	2.307	2.201	12.414	27.432	1.6110	0.2335
GEOM. MEAN :	53.359	9.399	3.442	8.546	40.255	1.0205	0.4241
GEOM. STD. DEV. :	0.443	0.234	0.579	1.092	0.666	1.7227	0.4691
1ST QUARTILE :	35.583	*****	1.838	3.604	28.947	0.5992	0.2578
2ND QUARTILE :	48.782	*****	3.085	9.665	41.381	2.0483	0.3642
3RD QUARTILE :	65.950	*****	4.958	12.675	68.799	2.9910	0.5733

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : MILTON/CUMULATIVE PRECIP.

#10

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	10.0000	6.000	7.0000	9.0000	10.000	6.000	6.0000
MAXIMUM :	0.0867	1.104	9.4337	1.8048	0.127	5.580	0.7056
MINIMUM :	0.0212	0.565	2.0522	0.5850	0.028	1.418	0.0434
RANGE :	0.0654	0.539	7.3815	1.2198	0.099	4.163	0.6621
ARITH. MEAN :	0.0556	0.884	5.7784	1.1228	0.083	3.763	0.2692
ARITH. STD. DEV. :	0.0237	0.181	2.5108	0.4151	0.034	1.400	0.2387
GEOM. MEAN :	0.0501	0.866	5.2220	1.0533	0.076	3.477	0.1885
GEOM. STD. DEV. :	0.5122	0.229	0.5196	0.3858	0.475	0.476	0.9784
1ST QUARTILE :	0.0268	0.707	2.7564	0.7426	0.054	2.420	0.0708
2ND QUARTILE :	0.0577	0.897	5.5307	1.0393	0.080	3.799	0.2199
3RD QUARTILE :	0.0687	0.946	7.2204	1.2795	0.113	4.353	0.3012

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MILTON/CUMULATIVE PRECIP. #10

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	10.00000
MAXIMUM	:	0.16008
MINIMUM	:	0.00325
RANGE	:	0.15683
ARITH. MEAN	:	0.02478
ARITH. STD. DEV	:	0.04795
GEOM. MEAN	:	0.01094
GEOM. STD. DEV.	:	1.11214
1ST QUARTILE	:	0.00542
2ND QUARTILE	:	0.00787
3RD QUARTILE	:	0.01429

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MOONBEAM/CUMULATIVE PRECIP.

#27

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	6.0000	8.0000	11.00	11.000	8.000	11.000
MAXIMUM :	91.0	3.9758	6.6980	195.50	28.670	20.020	9.460
MINIMUM :	20.0	0.7096	0.7524	27.50	2.640	3.780	0.445
RANGE :	71.0	3.2661	5.9456	168.00	26.030	16.240	9.015
ARITH. MEAN :	52.3	2.1113	3.6185	99.48	14.184	10.674	4.950
ARITH. STD. DEV :	26.0	1.1344	1.9732	49.38	7.052	6.461	2.779
GEOM. MEAN :	46.3	1.8443	3.0335	87.74	12.248	8.878	3.922
GEOM. STD. DEV. :	0.5	0.5963	0.7013	0.55	0.635	0.668	0.862
1ST QUARTILE :	32.5	1.0201	2.2842	61.70	8.805	5.025	2.580
2ND QUARTILE :	45.0	2.0926	3.5427	81.43	12.890	9.435	4.600
3RD QUARTILE :	76.5	2.4589	4.9219	119.98	16.650	16.335	5.870

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : MOONBEAM/CUMULATIVE PRECIP.

#27

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	7.000	8.000	9.000	9.000	10.000	8.0000	6.0000
MAXIMUM :	59.150	13.195	22.050	6.450	45.360	10.0800	0.3400
MINIMUM :	4.840	0.315	0.350	0.340	1.496	0.1400	0.0315
RANGE :	54.310	12.880	21.700	6.110	43.864	9.9400	0.3085
ARITH. MEAN :	28.017	3.012	5.148	2.619	19.539	2.4706	0.1764
ARITH. STD. DEV :	19.006	4.360	6.903	2.170	13.528	3.3100	0.1282
GEOM. MEAN :	22.103	1.356	2.487	1.743	14.385	1.0947	0.1292
GEOM. STD. DEV. :	0.812	1.345	1.318	1.052	0.970	1.4618	0.9450
1ST QUARTILE :	11.350	0.397	0.800	0.665	8.735	0.3155	0.0507
2ND QUARTILE :	21.180	1.450	2.165	1.725	16.057	1.2665	0.1720
3RD QUARTILE :	35.955	3.445	4.905	3.480	24.565	3.1905	0.2640

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : MOONBEAM/CUMULATIVE PRECIP.

#27

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	6.0000	6.000	6.0000	6.0000	6.000	6.000	6.0000
MAXIMUM :	0.0850	2.654	2.5041	0.4760	0.091	2.450	0.6459
MINIMUM :	0.0175	0.218	0.5757	0.0630	0.035	0.323	0.0646
RANGE :	0.0675	2.436	1.9283	0.4130	0.056	2.127	0.5813
ARITH. MEAN :	0.0430	0.801	1.6414	0.2205	0.072	1.304	0.2430
ARITH. STD. DEV :	0.0230	0.927	0.8031	0.1581	0.021	0.941	0.2176
GEOM. MEAN :	0.0384	0.534	1.4446	0.1752	0.068	0.976	0.1776
GEOM. STD. DEV. :	0.5203	0.917	0.5899	0.7634	0.362	0.888	0.8633
1ST QUARTILE :	0.0245	0.225	0.7556	0.0770	0.049	0.369	0.0775
2ND QUARTILE :	0.0392	0.491	1.7782	0.1765	0.076	1.251	0.1840
3RD QUARTILE :	0.0450	0.631	2.2526	0.2590	0.087	1.982	0.2724

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MOONBEAM/CUMULATIVE PRECIP.

#27

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	6.00000
MAXIMUM	:	0.08820
MINIMUM	:	0.00350
RANGE	:	0.08470
ARITH. MEAN	:	0.01862
ARITH. STD. DEV	:	0.03410
GEOM. MEAN	:	0.00752
GEOM. STD. DEV.	:	1.22556
1ST QUARTILE	:	0.00387
2ND QUARTILE	:	0.00450
3RD QUARTILE	:	0.00567

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : NAKINA/CUMULATIVE PRECIP.

#30

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP.	FREE H+	TOTAL H+	SULPHATE	NITRATE	CALCIUM	CHLORIDE
	MM	LAH MG/M**2	TO PH8.3 MG/M**2	MG/M**2	AS N MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	12.0	3.0000	11.0000	11.00	11.000	7.000	11.000
MAXIMUM :	80.0	1.7391	3.4974	144.00	20.900	60.800	9.614
MINIMUM :	6.3	0.0512	0.6751	9.75	2.275	2.250	1.800
RANGE :	73.7	1.6879	2.8223	134.25	18.625	58.550	7.814
ARITH. MEAN :	35.6	0.9167	1.4715	68.23	10.851	17.565	4.587
ARITH. STD. DEV :	19.8	0.8448	0.9730	45.22	6.262	20.852	2.639
GEOM. MEAN :	30.2	0.4405	1.2578	49.41	8.843	10.033	3.970
GEOM. STD. DEV. :	0.7	1.8872	0.5553	0.97	0.745	1.147	0.560
1ST QUARTILE :	21.3	*****	0.7240	14.00	4.575	2.934	2.331
2ND QUARTILE :	33.1	*****	1.1101	61.41	9.726	7.137	3.177
3RD QUARTILE :	43.3	*****	1.4589	97.77	13.827	21.006	6.357

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : NAKINA/CUMULATIVE PRECIP.

#30

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES :	11.000	7.000	11.000	10.000	11.000	11.0000	9.0000
MAXIMUM :	65.600	12.000	16.800	4.598	31.200	4.4000	1.2540
MINIMUM :	5.175	0.225	0.301	0.200	4.160	0.0225	0.0600
RANGE :	60.425	11.775	16.498	4.398	27.040	4.3775	1.1940
ARITH. MEAN :	18.149	3.458	2.467	1.634	11.257	1.0201	0.3144
ARITH. STD. DEV :	17.200	4.213	4.832	1.281	7.856	1.2483	0.3807
GEOM. MEAN :	13.840	1.631	1.055	1.216	9.352	0.5104	0.1881
GEOM. STD. DEV. :	0.715	1.456	1.141	0.874	0.624	1.4257	1.0474
1ST QUARTILE :	7.422	0.263	0.425	0.673	4.646	0.2038	0.0626
2ND QUARTILE :	12.453	1.481	0.724	1.177	9.061	0.4865	0.1609
3RD QUARTILE :	17.557	4.359	1.423	2.098	13.465	1.1209	0.2944

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : NAKINA/CUMULATIVE PRECIP.

#30

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	9.0000	8.000	6.0000	9.0000	9.000	7.000	8.0000
MAXIMUM :	0.0400	0.640	10.6458	0.4000	0.080	5.523	0.6508
MINIMUM :	0.0100	0.113	1.1768	0.0400	0.020	0.565	0.0271
RANGE :	0.0300	0.527	9.4690	0.3600	0.060	4.958	0.6237
ARITH. MEAN :	0.0211	0.355	4.2856	0.1656	0.045	2.148	0.1994
ARITH. STD. DEV. :	0.0091	0.235	3.5089	0.1104	0.018	1.778	0.2094
GEOM. MEAN :	0.0195	0.280	3.1981	0.1348	0.042	1.627	0.1223
GEOM. STD. DEV. :	0.4074	0.773	0.8651	0.7052	0.407	0.804	1.0853
1ST QUARTILE :	0.0153	0.129	1.1861	0.0793	0.033	0.661	0.0542
2ND QUARTILE :	0.0178	0.326	3.9514	0.1348	0.040	1.462	0.1350
3RD QUARTILE :	0.0217	0.590	4.7927	0.1906	0.051	2.633	0.2692

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : NAKINA/CUMULATIVE PRECIP.

#30

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	8.00000
MAXIMUM	:	0.01347
MINIMUM	:	0.00100
RANGE	:	0.01247
ARITH. MEAN	:	0.00410
ARITH. STD. DEV	:	0.00390
GEOM. MEAN	:	0.00314
GEOM. STD. DEV.	:	0.73386
1ST QUARTILE	:	0.00237
2ND QUARTILE	:	0.00313
3RD QUARTILE	:	0.00368

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PALMERSTON/CUMULATIVE PRECIP. #08

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	9.0000	11.0000	12.00	11.000	9.000	11.000
MAXIMUM :	132.0	6.6125	13.3848	844.80	79.200	58.220	52.800
MINIMUM :	17.0	1.0005	0.5712	69.60	11.220	8.160	3.440
RANGE :	115.0	5.6120	12.8136	775.20	67.980	50.060	49.360
ARITH. MEAN :	67.9	3.3496	6.1122	298.01	38.090	27.387	13.730
ARITH. STD. DEV :	34.1	1.8165	3.7607	213.33	21.776	18.128	14.141
GEOM. MEAN :	58.7	2.8808	4.7835	238.37	32.312	21.921	9.708
GEOM. STD. DEV. :	0.6	0.6122	0.8587	0.72	0.624	0.733	0.833
1ST QUARTILE :	40.0	1.7063	2.9363	151.47	17.880	10.675	4.315
2ND QUARTILE :	73.0	2.9708	5.0563	283.05	33.847	18.247	8.021
3RD QUARTILE :	80.8	4.0480	8.1692	317.25	50.240	38.254	16.775

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PALMERSTON/CUMULATIVE PRECIP. #08

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES :	10.000	10.000	12.000	11.000	12.000	11.0000	10.0000
MAXIMUM :	109.560	26.400	19.800	29.040	86.655	3.8400	0.9240
MINIMUM :	27.520	2.220	0.771	0.385	15.840	0.2590	0.0740
RANGE :	82.040	24.180	19.029	28.654	70.815	3.5810	0.8500
ARITH. MEAN :	61.024	8.139	4.231	7.114	48.057	1.3537	0.3693
ARITH. STD. DEV :	28.995	7.392	5.079	7.999	24.582	1.1009	0.2962
GEOM. MEAN :	54.628	5.976	2.884	4.329	41.738	1.0177	0.2724
GEOM. STD. DEV. :	0.507	0.808	0.850	1.121	0.581	0.8064	0.8524
1ST QUARTILE :	30.455	2.717	1.670	2.263	23.205	0.4610	0.1201
2ND QUARTILE :	59.225	5.464	3.415	3.890	48.095	1.0155	0.2730
3RD QUARTILE :	78.371	10.065	4.227	8.470	64.195	1.4716	0.4192

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

STATION NAME : PALMERSTON/CUMULATIVE PRECIP. #08

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	10.0000	9.000	8.0000	9.0000	10.000	9.000	8.0000
MAXIMUM :	0.5280	5.054	13.0799	1.9800	0.132	9.017	0.7876
MINIMUM :	0.0185	0.158	1.3390	0.1420	0.037	0.969	0.0391
RANGE :	0.5095	4.896	11.7408	1.8380	0.095	8.048	0.7485
ARITH. MEAN :	0.0890	1.205	5.0201	0.6203	0.077	3.864	0.3697
ARITH. STD. DEV :	0.1553	1.510	3.9829	0.5568	0.029	2.753	0.2736
GEOM. MEAN :	0.0479	0.761	3.7458	0.4672	0.073	3.028	0.2507
GEOM. STD. DEV. :	0.9440	0.955	0.8448	0.7803	0.385	0.768	1.0981
1ST QUARTILE :	0.0267	0.503	1.5634	0.2652	0.053	1.401	0.1355
2ND QUARTILE :	0.0380	0.582	4.3369	0.3996	0.076	3.295	0.3769
3RD QUARTILE :	0.0483	0.849	6.9705	0.6555	0.081	4.010	0.5529

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : PALMERSTON/CUMULATIVE PRECIP. #08

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	9.00000
MAXIMUM	:	0.05690
MINIMUM	:	0.00185
RANGE	:	0.05505
ARITH. MEAN	:	0.01769
ARITH. STD. DEV	:	0.01790
GEOM. MEAN	:	0.01106
GEOM. STD. DEV.	:	1.07605
1ST QUARTILE	:	0.00568
2ND QUARTILE	:	0.00827
3RD QUARTILE	:	0.01990

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PICKLE LAKE/CUMULATIVE PRECIP. #36

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	7.0000	8.0000	9.00	11.000	7.000	11.000
MAXIMUM :	87.7	1.2625	4.3920	96.47	15.786	41.219	12.690
MINIMUM :	9.0	0.0392	0.8214	19.69	4.117	3.222	0.200
RANGE :	78.7	1.2233	3.5706	76.78	11.669	37.997	12.490
ARITH. MEAN :	42.4	0.4288	2.2286	52.40	8.724	18.192	5.690
ARITH. STD. DEV :	24.0	0.4024	1.4390	22.34	3.541	13.372	3.653
GEOM. MEAN :	35.5	0.2735	1.8479	48.13	8.069	13.687	4.022
GEOM. STD. DEV. :	0.7	1.1526	0.6600	0.45	0.421	0.879	1.135
1ST QUARTILE :	21.4	0.0647	0.9877	37.99	5.150	5.001	2.250
2ND QUARTILE :	39.6	0.3599	1.9625	47.50	8.312	12.546	5.175
3RD QUARTILE :	61.3	0.4449	3.3575	55.46	10.963	25.515	7.615

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PICKLE LAKE/CUMULATIVE PRECIP. #36

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

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	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	9.000	6.000	8.000	7.000	9.000	9.0000	6.0000
MAXIMUM :	37.711	9.647	9.647	7.893	24.030	3.1500	1.2278
MINIMUM :	5.424	0.537	0.089	1.176	2.649	0.2148	0.1176
RANGE :	32.287	9.110	9.557	6.717	21.381	2.9352	1.1102
ARITH. MEAN :	18.248	3.535	3.749	2.941	9.018	1.5709	0.3801
ARITH. STD. DEV :	11.760	3.449	3.436	2.428	6.541	0.8732	0.4297
GEOM. MEAN :	14.781	2.218	1.990	2.308	7.340	1.2620	0.2571
GEOM. STD. DEV. :	0.717	1.129	1.515	0.722	0.676	0.8201	0.8895
1ST QUARTILE :	7.265	0.607	1.078	1.188	4.492	0.9112	0.1266
2ND QUARTILE :	15.035	2.548	2.756	1.724	6.698	1.5094	0.1898
3RD QUARTILE :	21.329	3.997	6.293	3.434	9.679	1.8698	0.3198

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PICKLE LAKE/CUMULATIVE PRECIP. #36

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	6.0000	5.000	4.0000	6.0000	6.000	4.000	5.0000
MAXIMUM :	0.0438	0.549	4.9800	0.2744	0.088	6.844	1.4470
MINIMUM :	0.0196	0.160	1.4053	0.0438	0.039	0.652	0.0992
RANGE :	0.0242	0.388	3.5747	0.2305	0.048	6.192	1.3478
ARITH. MEAN :	0.0300	0.344	3.4300	0.1649	0.060	3.466	0.4376
ARITH. STD. DEV :	0.0095	0.151	1.5832	0.1002	0.019	2.938	0.5700
GEOM. MEAN :	0.0287	0.316	3.0883	0.1349	0.057	2.358	0.2603
GEOM. STD. DEV. :	0.3239	0.474	0.5671	0.7438	0.324	1.099	1.0450
1ST QUARTILE :	0.0198	0.209	2.2000	0.0619	0.040	1.023	0.1263
2ND QUARTILE :	0.0307	0.290	3.6674	0.1599	0.061	3.185	0.1622
3RD QUARTILE :	0.0344	0.375	4.6600	0.2406	0.069	5.910	0.2441

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PICKLE LAKE/CUMULATIVE PRECIP. #36

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	6.00000
MAXIMUM	:	0.02034
MINIMUM	:	0.00274
RANGE	:	0.01759
ARITH. MEAN	:	0.00933
ARITH. STD. DEV.	:	0.00770
GEOM. MEAN	:	0.00690
GEOM. STD. DEV.	:	0.85592
1ST QUARTILE	:	0.00312
2ND QUARTILE	:	0.00592
3RD QUARTILE	:	0.01269

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PORT STANLEY/CUMULATIVE PRECIP. #03

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP.	FREE H+	TOTAL H+	SULPHATE	NITRATE	CALCIUM	CHLORIDE
	MM	LAB MG/M**2	TO PH8.3 MG/M**2	MG/M**2	AS N MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	12.0	9.0000	10.0000	11.00	11.000	8.000	11.000
MAXIMUM :	121.0	9.3926	13.4794	725.40	106.470	42.350	33.930
MINIMUM :	15.0	0.6700	1.5300	84.10	13.630	10.440	3.770
RANGE :	106.0	8.7226	11.9494	641.30	92.840	31.910	30.160
ARITH. MEAN :	64.2	5.4312	7.0749	317.93	44.576	24.906	13.197
ARITH. STD. DEV :	36.9	3.1864	4.2163	199.53	27.515	11.231	8.615
GEOM. MEAN :	53.5	4.1554	5.6555	259.88	37.679	22.417	10.983
GEOM. STD. DEV. :	0.7	0.9135	0.7732	0.70	0.614	0.513	0.645
1ST QUARTILE :	33.5	2.6582	2.3079	116.62	21.795	14.065	5.405
2ND QUARTILE :	58.0	4.6097	6.8665	281.10	35.510	26.815	11.675
3RD QUARTILE :	94.5	7.8414	10.5067	403.50	58.720	32.350	14.240

\*\*\*\*\* : INSUFFICIENT DATA

NOTE (1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PORT STANLEY/CUMULATIVE PRECIP.

#03

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

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	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES :	10.000	10.000	10.000	10.000	10.000	10.0000	9.0000
MAXIMUM :	99.220	18.270	6.050	9.680	72.600	3.2760	0.5670
MINIMUM :	13.050	1.885	0.530	0.390	10.382	0.1950	0.0870
RANGE :	86.170	16.385	5.520	9.290	62.218	3.0810	0.4800
ARITH. MEAN :	43.459	5.648	2.856	3.955	30.754	1.2698	0.3421
ARITH. STD. DEV. :	25.308	4.846	1.849	2.930	19.042	1.1199	0.1764
GEOM. MEAN :	37.370	4.415	2.191	2.883	25.843	0.8461	0.2891
GEOM. STD. DEV. :	0.590	0.706	0.846	0.938	0.635	1.0037	0.6766
1ST QUARTILE :	24.330	2.200	0.825	1.680	13.242	0.2895	0.1615
2ND QUARTILE :	39.145	4.767	3.185	3.060	26.223	1.0480	0.3230
3RD QUARTILE :	51.785	6.240	3.610	5.505	39.280	1.5160	0.4700

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PORT STANLEY/CUMULATIVE PRECIP. #03

PERIOD OF REPORT : DEC 31, 80 TO JAN 5.82

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	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	10.0000	9.000	7.0000	10.0000	10.000	8.000	9.0000
MAXIMUM :	0.0605	1.300	9.2622	0.9270	0.121	7.395	0.3854
MINIMUM :	0.0145	0.260	1.1527	0.1260	0.015	1.022	0.0723
RANGE :	0.0460	1.040	8.1094	0.8010	0.106	6.373	0.3131
ARITH. MEAN :	0.0352	0.612	3.3727	0.5183	0.063	3.605	0.2173
ARITH. STD. DEV :	0.0154	0.311	2.7332	0.2977	0.034	2.298	0.1297
GEOM. MEAN :	0.0320	0.550	2.7339	0.4344	0.053	2.992	0.1794
GEOM. STD. DEV. :	0.4803	0.493	0.6612	0.6618	0.645	0.668	0.6886
1ST QUARTILE :	0.0192	0.368	1.4055	0.2720	0.033	2.049	0.0901
2ND QUARTILE :	0.0362	0.579	2.5153	0.4095	0.058	2.634	0.1778
3RD QUARTILE :	0.0440	0.618	3.2527	0.7675	0.084	5.531	0.2912

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PORT STANLEY/CUMULATIVE PRECIP. #03

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

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CAUDIUM

MG/M\*\*2

# OF SAMPLES	:	10.00000
MAXIMUM	:	0.04840
MINIMUM	:	0.00195
RANGE	:	0.04645
ARITH. MEAN	:	0.01694
ARITH. STD. DEV	:	0.01510
GEOM. MEAN	:	0.01151
GEOM. STD. DEV.	:	0.98623
1ST QUARTILE	:	0.00495
2ND QUARTILE	:	0.01310
3RD QUARTILE	:	0.01810

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : QUETICO CENTRE/CUMULATIVE PRECIP. #32

PERIOD OF REPORT : NOV 30, 81 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	1.0	1.0000	1.0000	1.00	1.000	1.000	1.000
MAXIMUM :	23.7	0.6822	1.6180	14.19	8.516	1.183	1.419
MINIMUM :	23.7	0.6822	1.6180	14.19	8.516	1.183	1.419
RANGE :	0.0	0.0000	0.0000	0.00	0.000	0.000	0.000
ARITH. MEAN :	*****	*****	*****	*****	*****	*****	*****
ARITH. STD. DEV :	*****	*****	*****	*****	*****	*****	*****
GEOM. MEAN :	*****	*****	*****	*****	*****	*****	*****
GEOM. STD. DEV. :	*****	*****	*****	*****	*****	*****	*****
1ST QUARTILE :	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : QUETICO CENTRE/CUMULATIVE PRECIP. #32

PERIOD OF REPORT : NOV 30, 81 TO JAN 5, 82

PAGE : 2

		KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES	:	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000
MAXIMUM	:	4.258	0.059	0.237	0.710	3.075	0.0237	0.0237
MINIMUM	:	4.258	0.059	0.237	0.710	3.075	0.0237	0.0237
RANGE	:	0.000	0.000	0.000	0.000	0.000	0.0000	0.0000
ARITH. MEAN	:	*****	*****	*****	*****	*****	*****	*****
ARITH. STD. DEV	:	*****	*****	*****	*****	*****	*****	*****
GEOM. MEAN	:	*****	*****	*****	*****	*****	*****	*****
GEOM. STD. DEV.	:	*****	*****	*****	*****	*****	*****	*****
1ST QUARTILE	:	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE	:	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE	:	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : QUETICO CENTRE/CUMULATIVE PRECIP. #32

PERIOD OF REPORT : NOV 30, 81 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	1.0000	1.000	1.0000	1.0000	1.000	1.000	1.0000
MAXIMUM :	0.0118	0.054	0.5159	0.0237	0.024	0.314	0.0627
MINIMUM :	0.0118	0.054	0.5159	0.0237	0.024	0.314	0.0627
RANGE :	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.0000
ARITH. MEAN :	*****	*****	*****	*****	*****	*****	*****
ARITH. STD. DEV :	*****	*****	*****	*****	*****	*****	*****
GEOM. MEAN :	*****	*****	*****	*****	*****	*****	*****
GEOM. STD. DEV. :	*****	*****	*****	*****	*****	*****	*****
1ST QUARTILE :	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : QUETICO CENTRE/CUMULATIVE PRECIP. #32

PERIOD OF REPORT : NOV 30, 81 TO JAN 5.82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	1.00000
MAXIMUM	:	0.00237
MINIMUM	:	0.00237
RANGE	:	0.00000
ARITH. MEAN	:	*****
ARITH. STD. DEV	:	*****
GEOM. MEAN	:	*****
GEOM. STD. DEV.	:	*****
1ST QUARTILE	:	*****
2ND QUARTILE	:	*****
3RD QUARTILE	:	*****

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : RAMSEY/CUMULATIVE PRECIP.

#26

PERIOD OF REPORT : DEC 30, 80 TO JAN 6, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	11.0000	11.0000	11.00	11.000	11.000	11.000
MAXIMUM :	123.0	7.8892	11.1072	280.80	32.190	61.050	11.100
MINIMUM :	14.0	0.8420	1.8504	54.00	7.020	2.480	1.560
RANGE :	109.0	7.0472	9.2568	226.80	25.170	58.570	9.540
ARITH. MEAN :	62.7	2.7989	4.9005	151.19	20.645	14.382	5.071
ARITH. STD. DEV :	35.6	1.8960	2.3997	80.79	8.521	16.651	2.838
GEOM. MEAN :	52.0	2.3634	4.4612	130.03	18.797	9.240	4.333
GEOM. STD. DEV. :	0.7	0.6035	0.4503	0.60	0.481	0.960	0.616
1ST QUARTILE :	36.5	1.4884	3.3879	65.80	12.000	3.360	2.190
2ND QUARTILE :	59.0	2.4674	4.2574	124.72	18.740	8.650	4.640
3RD QUARTILE :	91.0	2.8249	5.4030	219.17	27.760	15.340	6.365

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : RAMSEY/CUMULATIVE PRECIP.

#26

PERIOD OF REPORT : DEC 30, 80 TO JAN 6, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	11.000	10.000	10.000	11.000	11.000	11.0000	10.0000
MAXIMUM :	55.500	7.770	11.100	5.550	41.514	3.2240	1.5540
MINIMUM :	9.840	0.155	0.720	0.540	0.738	0.0930	0.0480
RANGE :	45.660	7.615	10.380	5.010	40.776	3.1310	1.5060
ARITH. MEAN :	27.531	2.202	3.499	3.001	18.871	1.0955	0.3248
ARITH. STD. DEV :	17.735	2.402	3.229	1.564	14.074	1.0696	0.4480
GEOM. MEAN :	22.447	1.195	2.422	2.531	12.400	0.5399	0.1860
GEOM. STD. DEV. :	0.679	1.259	0.920	0.683	1.173	1.4079	1.0550
1ST QUARTILE :	11.700	0.394	0.885	1.460	6.411	0.1095	0.0617
2ND QUARTILE :	16.080	1.500	2.860	2.625	10.800	0.5175	0.1905
3RD QUARTILE :	43.750	2.645	4.020	4.030	31.830	1.8710	0.3120

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : RAMSEY/CUMULATIVE PRECIP.

#26

PERIOD OF REPORT : DEC 30, 80 TO JAN 6, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	10.0000	9.000	9.0000	10.0000	10.000	8.000	10.0000
MAXIMUM :	0.1120	1.078	25.4967	0.6820	0.444	30.358	0.6712
MINIMUM :	0.0210	0.277	1.4895	0.1550	0.031	0.244	0.1174
RANGE :	0.0910	0.801	24.0072	0.5270	0.413	30.115	0.5538
ARITH. MEAN :	0.0546	0.697	5.2164	0.3225	0.105	5.670	0.2501
ARITH. STD. DEV :	0.0332	0.286	7.7054	0.1481	0.122	10.142	0.1679
GEOM. MEAN :	0.0467	0.638	3.1698	0.2962	0.076	1.912	0.2161
GEOM. STD. DEV. :	0.5865	0.466	0.8865	0.4321	0.743	1.568	0.5289
1ST QUARTILE :	0.0275	0.422	1.7892	0.2010	0.045	0.524	0.1436
2ND QUARTILE :	0.0455	0.683	2.2226	0.3185	0.063	2.096	0.1922
3RD QUARTILE :	0.0617	0.820	3.4367	0.3345	0.091	4.758	0.2455

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : RAMSEY/CUMULATIVE PRECIP.

#26

PERIOD OF REPORT : DEC 30, 80 TO JAN 6, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	10.00000
MAXIMUM	:	0.01260
MINIMUM	:	0.00240
RANGE	:	0.01020
ARITH. MEAN	:	0.00688
ARITH. STD. DEV	:	0.00379
GEOM. MEAN	:	0.00598
GEOM. STD. DEV.	:	0.56728
1ST QUARTILE	:	0.00357
2ND QUARTILE	:	0.00585
3RD QUARTILE	:	0.00870

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SHALLOW LAKE/CUMULATIVE PRECIP. #09

PERIOD OF REPORT : DEC 30, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	10.0000	10.0000	11.00	12.000	11.000	11.000
MAXIMUM :	115.0	10.8213	12.8688	509.04	71.000	40.443	16.400
MINIMUM :	15.0	1.0377	1.5660	48.45	5.250	3.300	1.200
RANGE :	100.0	9.7836	11.3028	460.59	65.750	37.143	15.200
ARITH. MEAN :	66.9	4.3042	6.4059	230.04	37.197	16.460	9.257
ARITH. STD. DEV :	30.6	2.9737	3.8552	136.87	18.641	11.298	5.185
GEOM. MEAN :	57.8	3.4055	5.1254	188.46	31.249	12.793	7.133
GEOM. STD. DEV. :	0.6	0.7553	0.7663	0.72	0.711	0.802	0.891
1ST QUARTILE :	48.5	1.6915	1.9982	101.62	21.665	6.310	2.710
2ND QUARTILE :	71.5	3.9199	6.7528	207.16	38.045	12.630	10.951
3RD QUARTILE :	87.5	5.5639	8.9520	297.87	51.340	22.100	12.940

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SHALLOW LAKE/CUMULATIVE PRECIP. #09

PERIOD OF REPORT : DEC 30, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	10.000	11.000	10.000	11.000	11.000	10.0000	10.0000
MAXIMUM :	68.000	9.120	5.600	7.137	50.000	3.4580	0.3920
MINIMUM :	5.700	0.750	0.300	0.300	4.650	0.0095	0.0300
RANGE :	62.300	8.370	5.300	6.837	45.350	3.4485	0.3620
ARITH. MEAN :	38.983	3.407	2.523	3.872	30.298	1.3077	0.1842
ARITH. STD. DEV :	21.685	2.539	1.758	2.605	15.253	1.2093	0.1166
GEOM. MEAN :	30.958	2.591	1.888	2.719	24.864	0.6605	0.1444
GEOM. STD. DEV. :	0.829	0.808	0.892	1.039	0.770	1.7159	0.8114
1ST QUARTILE :	16.340	1.170	1.050	1.020	13.375	0.3600	0.0710
2ND QUARTILE :	38.503	2.455	2.080	3.340	31.946	1.0040	0.1870
3RD QUARTILE :	55.720	4.620	3.662	6.360	42.735	1.2765	0.2449

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : SHALLOW LAKE/CUMULATIVE PRECIP. #09

PERIOD OF REPORT : DEC 30, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	10.0000	9.000	9.0000	10.0000	11.000	9.000	9.0000
MAXIMUM :	0.2000	1.833	7.8960	1.4274	0.115	5.349	0.7346
MINIMUM :	0.0075	0.077	0.2632	0.0205	0.015	0.236	0.0233
RANGE :	0.1925	1.756	7.6327	1.4069	0.100	5.113	0.7113
ARITH. MEAN :	0.0480	0.581	2.8136	0.4794	0.067	2.046	0.2359
ARITH. STD. DEV :	0.0552	0.513	2.7107	0.4249	0.032	1.909	0.2040
GEOM. MEAN :	0.0333	0.424	1.7880	0.2907	0.057	1.304	0.1715
GEOM. STD. DEV. :	0.8443	0.884	1.0725	1.2562	0.666	1.067	0.9274
1ST QUARTILE :	0.0197	0.246	0.9117	0.1230	0.030	0.540	0.1272
2ND QUARTILE :	0.0330	0.468	1.3815	0.4300	0.066	1.138	0.1780
3RD QUARTILE :	0.0408	0.595	2.9668	0.5760	0.087	2.341	0.2195

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : SHALLOW LAKE/CUMULATIVE PRECIP. #09

PERIOD OF REPORT : DEC 30, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	10.00000
MAXIMUM	:	0.07930
MINIMUM	:	0.00150
RANGE	:	0.07780
ARITH. MEAN	:	0.01703
ARITH. STD. DEV	:	0.02322
GEOM. MEAN	:	0.00964
GEOM. STD. DEV.	:	1.07874
1ST QUARTILE	:	0.00530
2ND QUARTILE	:	0.00790
3RD QUARTILE	:	0.01415

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SMITH'S FALLS/CUMULATIVE PRECIP. #15

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	9.0000	10.0000	12.00	12.000	9.000	12.000
MAXIMUM :	189.5	9.2813	15.9938	668.75	71.250	91.440	27.750
MINIMUM :	12.1	1.0323	2.7178	47.19	16.819	7.502	4.214
RANGE :	177.4	8.2490	13.2760	621.56	54.431	83.938	23.536
ARITH. MFAN :	84.2	3.1323	5.9958	289.00	40.960	47.972	14.990
ARITH. STD. DEV :	50.7	2.7138	4.3155	217.20	18.336	33.117	6.492
GEOM. MEAN :	66.9	2.3952	4.9787	214.11	37.200	34.890	13.574
GEOM. STD. DEV. :	0.8	0.7414	0.6105	0.85	0.466	0.940	0.495
1ST QUARTILE :	43.9	1.2492	2.9078	115.21	25.686	14.506	11.060
2ND QUARTILE :	90.1	1.8484	4.4296	240.16	35.515	41.636	13.790
3RD QUARTILE :	117.9	3.0642	6.3322	445.27	56.356	67.044	18.793

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SMITH'S FALLS/CUMULATIVE PRECIP. #15

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	11.000	3.000	12.000	12.000	12.000	10.0000	10.0000
MAXIMUM :	236.875	20.845	10.132	17.575	71.252	21.2240	1.0000
MINIMUM :	4.477	3.462	0.925	2.107	3.073	0.0726	0.0903
RANGE :	232.398	17.383	9.207	15.468	68.179	21.1514	0.9097
ARITH. MEAN :	57.861	10.347	4.715	7.935	32.715	3.3296	0.4753
ARITH. STD. DEV :	64.748	9.238	3.155	5.189	24.286	6.3710	0.2932
GEOM. MEAN :	36.272	7.862	3.556	6.482	22.696	1.1835	0.3685
GEOM. STD. DEV. :	1.052	0.908	0.858	0.680	1.002	1.5152	0.8475
1ST QUARTILE :	17.955	*****	1.508	4.195	10.854	0.4699	0.1498
2ND QUARTILE :	30.859	*****	4.421	6.591	31.222	1.1822	0.5300
3RD QUARTILE :	64.920	*****	7.010	11.278	49.100	2.2290	0.5938

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : SMITH'S FALLS/CUMULATIVE PRECIP. #15

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	10.0000	9.000	8.0000	10.0000	10.000	8.000	8.0000
MAXIMUM :	0.3750	1.591	8.2829	1.3265	0.189	9.556	1.4815
MINIMUM :	0.0129	0.240	0.6800	0.3367	0.026	0.283	0.0980
RANGE :	0.3620	1.352	7.6029	0.9898	0.164	9.273	1.3835
ARITH. MEAN :	0.0767	0.800	3.9968	0.7092	0.091	3.325	0.3715
ARITH. STD. DEV :	0.1076	0.375	3.0965	0.3921	0.050	3.187	0.4707
GEOM. MEAN :	0.0462	0.718	2.8490	0.6158	0.077	2.039	0.2302
GEOM. STD. DEV. :	0.9618	0.523	0.9367	0.5608	0.642	1.155	0.9504
1ST QUARTILE :	0.0219	0.569	1.4748	0.3594	0.044	1.000	0.1160
2ND QUARTILE :	0.0461	0.743	2.8903	0.5524	0.092	2.182	0.1493
3RD QUARTILE :	0.0594	0.908	7.1406	1.0080	0.118	5.200	0.4309

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SMITH'S FALLS/CUMULATIVE PRECIP. #15

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	10.00000
MAXIMUM	:	0.02880
MINIMUM	:	0.00129
RANGE	:	0.02750
ARITH. MEAN	:	0.01108
ARITH. STD. DEV	:	0.00832
GEOM. MEAN	:	0.00808
GEOM. STD. DEV.	:	0.92809
1ST QUARTILE	:	0.00380
2ND QUARTILE	:	0.01014
3RD QUARTILE	:	0.01378

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : UXBRIDGE/CUMULATIVE PRECIP.

#11

PERIOD OF REPORT : DEC 31, 80 TO JAN 4, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	10.0000	10.0000	12.00	12.000	7.000	11.000
MAXIMUM :	122.4	12.7026	15.8211	655.85	77.693	92.966	50.832
MINIMUM :	21.7	0.2008	1.3332	110.00	16.500	12.100	3.300
RANGE :	100.7	12.5017	14.4879	545.85	61.193	80.866	47.532
ARITH. MEAN :	74.6	4.6709	7.1263	320.53	44.075	43.255	17.981
ARITH. STD. DEV :	33.2	4.7303	5.5090	206.75	19.690	27.135	12.917
GEOM. MEAN :	66.6	2.5737	5.3578	261.10	39.895	36.135	14.543
GEOM. STD. DEV. :	0.5	1.2916	0.8172	0.68	0.480	0.672	0.703
1ST QUARTILE :	49.7	1.0412	2.8527	137.21	28.612	17.100	9.757
2ND QUARTILE :	71.5	2.3986	4.8320	261.57	42.023	33.822	13.311
3RD QUARTILE :	105.1	7.0756	9.9718	516.09	61.734	53.987	20.020

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : UXBRIDGE/CUMULATIVE PRECIP.

#11

PERIOD OF REPORT : DEC 31, 80 TO JAN 4, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES :	10.000	10.000	10.000	10.000	12.000	10.0000	9.0000
MAXIMUM :	124.800	15.600	10.920	19.544	70.200	8.1120	0.5460
MINIMUM :	16.500	0.137	0.550	0.000	12.650	0.1088	0.0550
RANGE :	108.300	15.462	10.370	19.544	57.550	8.0032	0.4910
ARITH. MEAN :	58.261	5.513	3.171	5.141	38.805	1.5334	0.3419
ARITH. STD. DEV :	33.483	4.128	3.031	5.862	21.194	2.3881	0.1784
GEOM. MEAN :	49.205	3.648	2.179	3.077	33.110	0.7550	0.2790
GEOM. STD. DEV. :	0.642	1.275	0.939	1.066	0.611	1.1987	0.7808
1ST QUARTILE :	26.050	2.312	0.799	0.779	20.140	0.3275	0.1550
2ND QUARTILE :	60.792	5.646	3.187	2.849	36.329	0.6354	0.3854
3RD QUARTILE :	72.862	6.033	3.468	7.361	55.412	1.4053	0.4256

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : UXBRIDGE/CUMULATIVE PRECIP.

#11

PERIOD OF REPORT : DEC 31, 80 TO JAN 4, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	9.0000	7.000	8.0000	9.0000	9.000	8.000	7.0000
MAXIMUM :	0.1224	0.983	9.7890	1.2108	0.122	7.217	1.1304
MINIMUM :	0.0174	0.338	1.0384	0.1632	0.035	0.859	0.0521
RANGE :	0.1049	0.645	8.7506	1.0476	0.087	6.359	1.0784
ARITH. MEAN :	0.0437	0.671	4.2658	0.6078	0.074	3.327	0.3412
ARITH. STD. DEV :	0.0320	0.252	2.8917	0.3668	0.030	2.523	0.3717
GEOM. MEAN :	0.0368	0.624	3.4349	0.5073	0.068	2.453	0.2234
GEOM. STD. DEV. :	0.5794	0.433	0.7311	0.6639	0.425	0.867	0.9834
1ST QUARTILE :	0.0248	0.343	2.0282	0.3046	0.050	1.168	0.0847
2ND QUARTILE :	0.0300	0.669	3.6461	0.4652	0.060	2.601	0.1911
3RD QUARTILE :	0.0447	0.846	5.9753	0.7275	0.089	5.500	0.3533

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : UXBRIDGE/CUMULATIVE PRECIP. #11

PERIOD OF REPORT : DEC 31, 80 TO JAN 4, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	9.00000
MAXIMUM	:	0.05200
MINIMUM	:	0.00225
RANGE	:	0.04975
ARITH. MEAN	:	0.01712
ARITH. STD. DEV	:	0.01623
GEOM. MEAN	:	0.01015
GEOM. STD. DEV.	:	1.18558
1ST QUARTILE	:	0.00273
2ND QUARTILE	:	0.01279
3RD QUARTILE	:	0.02217

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WATERLOO/CUMULATIVE PRECIP.

#07

PERIOD OF REPORT : DEC 31, 81 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	8.0000	10.0000	10.00	10.000	9.000	10.000
MAXIMUM :	99.0	10.5940	8.6730	348.10	74.250	66.640	21.750
MINIMUM :	27.1	0.5932	1.5400	81.30	26.100	8.808	6.380
RANGE :	71.9	10.0008	7.1330	266.80	48.150	57.832	15.370
ARITH. MEAN :	59.5	4.1334	4.5384	215.91	38.342	30.492	13.837
ARITH. STD. DEV :	19.6	3.1145	2.1690	78.77	13.633	21.197	5.843
GEOM. MEAN :	56.3	3.1229	4.0505	201.36	36.722	24.301	12.665
GEOM. STD. DEV. :	0.4	0.8716	0.5225	0.42	0.291	0.733	0.454
1ST QUARTILE :	47.5	2.0599	2.5880	161.20	29.578	13.307	7.955
2ND QUARTILE :	58.5	3.6298	4.3790	204.80	34.750	21.100	13.622
3RD QUARTILE :	73.2	5.2501	5.7130	252.32	39.270	34.335	18.090

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WATERLOO/CUMULATIVE PRECIP.

#07

PERIOD OF REPORT : DEC 31. 81 TO JAN 5.82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES :	9.000	8.000	10.000	9.000	9.000	9.0000	10.0000
MAXIMUM :	51.000	24.480	33.000	12.466	45.500	7.9920	1.0880
MINIMUM :	23.306	1.101	0.734	1.160	16.802	0.2710	0.1468
RANGE :	27.694	23.379	32.266	11.306	28.698	7.7210	0.9412
ARITH. MEAN :	40.320	8.035	5.402	5.294	31.764	1.6812	0.3999
ARITH. STD. DEV. :	9.779	7.633	9.791	3.506	8.856	2.4679	0.3038
GEOM. MEAN :	39.153	5.500	2.636	4.157	30.540	0.9090	0.3209
GEOM. STD. DEV. :	0.265	0.958	1.053	0.806	0.308	1.0717	0.6757
1ST QUARTILE :	32.289	3.316	1.403	2.390	24.510	0.3788	0.1650
2ND QUARTILE :	39.470	4.695	1.900	4.625	31.870	0.7380	0.2950
3RD QUARTILE :	47.030	11.340	3.590	5.996	35.425	1.0250	0.4575

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WATERLOO/CUMULATIVE PRECIP.

#07

PERIOD OF REPORT : DEC 31, 81 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	10.0000	8.000	8.0000	10.0000	10.000	8.000	9.0000
MAXIMUM :	0.1740	1.738	7.4400	1.0350	0.099	9.365	0.9509
MINIMUM :	0.0180	0.222	2.2201	0.1500	0.036	0.959	0.0647
RANGE :	0.1560	1.516	5.2199	0.8850	0.063	8.406	0.8862
ARITH. MEAN :	0.0488	0.790	4.9450	0.5570	0.061	3.757	0.3388
ARITH. STD. DEV :	0.0469	0.637	1.8257	0.2729	0.018	2.547	0.2907
GEOM. MEAN :	0.0378	0.586	4.5992	0.4868	0.059	3.115	0.2400
GEOM. STD. DEV. :	0.6732	0.831	0.4288	0.5885	0.292	0.668	0.9057
1ST QUARTILE :	0.0237	0.288	3.4905	0.3230	0.047	2.178	0.1137
2ND QUARTILE :	0.0317	0.499	5.2298	0.5565	0.058	3.403	0.1810
3RD QUARTILE :	0.0435	1.394	6.2295	0.7115	0.071	4.285	0.4453

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WATERLOO/CUMULATIVE PRECIP. #07

PERIOD OF REPORT : DEC 31, 81 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	10.00000
MAXIMUM	:	0.09000
MINIMUM	:	0.00290
RANGE	:	0.08710
ARITH. MEAN	:	0.01900
ARITH. STD. DEV	:	0.02597
GEOM. MEAN	:	0.01063
GEOM. STD. DEV.	:	1.09886
1ST QUARTILE	:	0.00327
2ND QUARTILE	:	0.01414
3RD QUARTILE	:	0.01740

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WHITNEY/CUMULATIVE PRECIP.

#19

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	11.0000	12.0000	12.00	12.000	12.000	12.000
MAXIMUM :	190.0	15.7070	20.1300	675.00	66.500	51.660	16.740
MINIMUM :	23.0	1.4104	2.7830	37.70	11.340	1.160	3.150
RANGE :	167.0	14.2966	17.3470	637.30	55.160	50.500	13.590
ARITH. MEAN :	84.6	4.8778	7.4026	241.10	31.757	12.293	8.462
ARITH. STD. DEV :	45.2	4.4693	5.4625	202.03	16.269	13.647	5.123
GEOM. MEAN :	74.7	3.5771	6.1018	168.27	28.210	7.585	7.085
GEOM. STD. DEV. :	0.5	0.7930	0.6126	0.94	0.512	1.083	0.632
1ST QUARTILE :	60.0	1.6652	4.0320	94.95	20.500	4.085	3.895
2ND QUARTILE :	72.5	3.0762	5.1412	155.80	27.380	8.530	6.700
3RD QUARTILE :	93.5	5.5954	8.2955	342.95	41.070	14.350	12.940

\*\*\*\*\* : INSUFFICIENT DATA

NOTE (1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WHITNEY/CUMULATIVE PRECIP.

#19

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	11.000	12.000	12.000	11.000	11.000	10.0000	10.0000
MAXIMUM :	78.000	7.875	29.880	7.560	60.420	8.7000	0.7560
MINIMUM :	6.900	0.115	0.115	0.290	3.634	0.1160	0.0290
RANGE :	71.100	7.760	29.765	7.270	56.786	8.5840	0.7270
ARITH. MEAN :	39.152	1.656	4.791	2.984	26.170	1.8008	0.2346
ARITH. STD. DEV. :	28.203	2.145	8.298	1.984	21.785	2.6982	0.2201
GEOM. MEAN :	29.306	0.817	1.803	2.310	18.079	0.7289	0.1573
GEOM. STD. DEV. :	0.847	1.326	1.481	0.859	0.943	1.4116	0.9825
1ST QUARTILE :	12.850	0.220	0.700	1.440	8.592	0.2215	0.0725
2ND QUARTILE :	26.590	1.095	1.560	2.500	13.052	0.5150	0.1550
3RD QUARTILE :	69.675	2.242	5.155	3.780	46.710	1.9605	0.3160

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WHITNEY/CUMULATIVE PRECIP.

#19

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	10.0000	9.000	9.0000	10.0000	10.000	8.000	9.0000
MAXIMUM :	0.2520	3.487	20.1810	1.1400	0.190	21.817	1.4773
MINIMUM :	0.0290	0.112	0.8963	0.1160	0.058	0.467	0.0629
RANGE :	0.2230	3.375	19.2847	1.0240	0.132	21.350	1.4144
ARITH. MEAN :	0.0689	0.789	6.0164	0.4860	0.094	3.858	0.4357
ARITH. STD. DEV :	0.0676	1.027	7.8342	0.3833	0.043	7.296	0.4565
GEOM. MEAN :	0.0534	0.511	2.9269	0.3628	0.087	1.545	0.2724
GEOM. STD. DEV. :	0.6642	0.905	1.2336	0.8197	0.396	1.254	1.0417
1ST QUARTILE :	0.0312	0.347	1.1246	0.1860	0.062	0.539	0.1168
2ND QUARTILE :	0.0440	0.469	1.3127	0.2960	0.082	1.454	0.1844
3RD QUARTILE :	0.0610	0.585	4.6101	0.6705	0.093	2.298	0.5150

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WHITNEY/CUMULATIVE PRECIP. #19

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	10.00000
MAXIMUM	:	0.05670
MINIMUM	:	0.00290
RANGE	:	0.05380
ARITH. MEAN	:	0.01499
ARITH. STD. DEV	:	0.01602
GEOM. MEAN	:	0.00980
GEOM. STD. DEV.	:	0.96933
1ST QUARTILE	:	0.00362
2ND QUARTILE	:	0.01225
3RD QUARTILE	:	0.01750

\*\*\*\*\* : INSUFFICIENT DATA

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ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
API05 - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WILBERFORCE/CUMULATIVE PRECIP. #18

PERIOD OF REPORT : DEC 31, 80 TO DEC 31, 81

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	10.0000	9.0000	11.00	11.000	11.000	11.000
MAXIMUM :	159.0	7.8426	12.1104	723.45	77.910	37.240	19.760
MINIMUM :	15.0	1.3999	0.5040	38.25	9.990	2.700	3.480
RANGE :	144.0	6.4427	11.6064	685.20	67.920	34.540	16.280
ARITH. MEAN :	76.2	4.5121	7.2119	277.60	37.808	15.552	10.270
ARITH. STD. DEV :	37.8	2.4215	3.4188	193.72	20.318	11.259	5.955
GEOM. MEAN :	66.2	3.8481	5.7078	207.44	32.763	11.839	8.730
GEOM. STD. DEV. :	0.6	0.6303	0.9532	0.90	0.588	0.824	0.609
1ST QUARTILE :	53.0	2.0795	5.5001	101.50	20.940	6.200	4.790
2ND QUARTILE :	78.5	4.1335	6.6465	251.42	32.160	11.260	7.770
3RD QUARTILE :	91.0	6.3738	8.6068	350.10	46.340	23.530	14.770

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WILBERFORCE/CUMULATIVE PRECIP. #18

PERIOD OF REPORT : DEC 31, 80 TO DEC 31, 81

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	8.000	11.000	11.000	11.000	10.000	8.0000	8.0000
MAXIMUM :	110.200	6.080	54.060	9.280	68.400	4.3320	0.9500
MINIMUM :	6.600	0.092	0.150	1.530	3.810	0.1050	0.0870
RANGE :	103.600	5.987	53.910	7.750	64.590	4.2270	0.8630
ARITH. MEAN :	44.471	2.288	9.566	3.978	30.022	1.0602	0.3040
ARITH. STD. DEV :	34.987	2.232	17.397	2.850	21.162	1.3580	0.2818
GEOM. MEAN :	32.705	1.142	2.168	3.240	21.996	0.6364	0.2275
GEOM. STD. DEV. :	0.898	1.446	1.820	0.652	0.936	1.0623	0.7792
1ST QUARTILE :	21.030	0.221	0.460	1.710	9.907	0.4280	0.1335
2ND QUARTILE :	33.435	1.345	1.345	2.535	28.375	0.6090	0.2000
3RD QUARTILE :	65.020	3.825	6.580	4.995	37.216	0.9855	0.3640

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WILBERFORCE/CUMULATIVE PRECIP. #18

PERIOD OF REPORT : DEC 31, 80 TO DEC 31, 81

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	8.0000	6.000	7.0000	8.0000	8.000	7.000	7.0000
MAXIMUM :	0.2320	1.670	12.9352	2.5650	0.116	5.803	1.3734
MINIMUM :	0.0255	0.321	1.1396	0.1160	0.051	0.508	0.0804
RANGE :	0.2065	1.349	11.7956	2.4490	0.065	5.296	1.2931
ARITH. MEAN :	0.0821	0.632	4.1156	0.8390	0.078	2.021	0.3804
ARITH. STD. DEV :	0.0810	0.523	4.1080	0.7559	0.022	1.863	0.4730
GEOM. MEAN :	0.0578	0.517	2.9528	0.6057	0.075	1.448	0.2280
GEOM. STD. DEV. :	0.8390	0.627	0.8425	0.9026	0.291	0.878	1.0131
1ST QUARTILE :	0.0327	0.345	1.2062	0.3780	0.056	0.551	0.0994
2ND QUARTILE :	0.0427	0.382	2.6022	0.7355	0.080	1.147	0.1493
3RD QUARTILE :	0.1240	0.527	4.1287	0.9020	0.091	2.474	0.3959

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WILBERFORCE/CUMULATIVE PRECIP. #18

PERIOD OF REPORT : DEC 31, 80 TO DEC 31, 81

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	8.00000
MAXIMUM	:	1.06400
MINIMUM	:	0.00510
RANGE	:	1.05890
ARITH. MEAN	:	0.14561
ARITH. STD. DEV	:	0.37115
GEOM. MEAN	:	0.02176
GEOM. STD. DEV.	:	1.67220
1ST QUARTILE	:	0.00870
2ND QUARTILE	:	0.01665
3RD QUARTILE	:	0.02255

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WILKESPORT/CUMULATIVE PRECIP.

#04

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12.0	9.0000	10.0000	12.00	11.000	5.000	10.000
MAXIMUM :	142.0	9.6336	12.1992	621.00	79.520	76.680	28.826
MINIMUM :	15.0	0.6159	2.8224	114.00	18.300	13.490	9.020
RANGE :	127.0	9.0176	9.3768	507.00	61.220	63.190	19.806
ARITH. MEAN :	60.0	3.6728	5.9497	315.34	43.672	48.514	18.366
ARITH. STD. DEV :	37.0	2.7624	3.2165	167.25	19.923	24.839	5.512
GEOM. MEAN :	49.8	2.7014	5.2692	275.71	39.642	41.548	17.523
GEOM. STD. DEV. :	0.7	0.9184	0.5101	0.55	0.467	0.692	0.338
1ST QUARTILE :	34.5	1.6488	3.2724	195.16	25.530	24.345	13.845
2ND QUARTILE :	52.5	2.8354	4.5128	270.82	35.810	44.000	19.070
3RD QUARTILE :	81.5	4.2194	7.3783	450.34	58.015	58.600	20.200

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WILKESPORT/CUMULATIVE PRECIP. #04

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	9.000	8.000	9.000	9.000	9.000	9.0000	10.0000
MAXIMUM :	107.352	17.892	9.940	12.922	89.460	7.5260	0.8946
MINIMUM :	28.380	1.775	0.710	1.600	18.876	0.2130	0.2100
RANGE :	78.972	16.117	9.230	11.322	70.584	7.3130	0.6846
ARITH. MEAN :	60.566	6.932	4.579	5.582	52.209	2.6426	0.3965
ARITH. STD. DEV. :	29.029	4.827	2.774	3.851	25.594	2.4304	0.2116
GEOM. MEAN :	54.654	5.784	3.650	4.418	45.957	1.5970	0.3561
GEOM. STD. DEV. :	0.485	0.646	0.804	0.750	0.562	1.1784	0.4710
1ST QUARTILE :	36.440	4.880	1.985	2.150	28.818	0.6550	0.2295
2ND QUARTILE :	50.710	5.570	4.795	4.060	42.480	1.3410	0.3460
3RD QUARTILE :	65.700	7.445	5.350	7.035	72.621	3.9680	0.4430

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WILKESPORT/CUMULATIVE PRECIP.

#04

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 3

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	10.0000	9.000	8.0000	10.0000	10.000	8.000	9.0000
MAXIMUM :	0.0710	2.930	11.9922	1.0560	0.142	10.897	1.3508
MINIMUM :	0.0160	0.115	1.7792	0.3700	0.032	1.638	0.0627
RANGE :	0.0550	2.815	10.2130	0.6860	0.110	9.258	1.2882
ARITH. MEAN :	0.0378	0.858	4.3809	0.6896	0.069	3.794	0.2972
ARITH. STD. DEV :	0.0208	0.825	3.2633	0.2936	0.035	2.983	0.4056
GEOM. MEAN :	0.0330	0.615	3.6643	0.6333	0.062	3.163	0.1835
GEOM. STD. DEV. :	0.5522	0.886	0.6023	0.4377	0.485	0.591	0.9217
1ST QUARTILE :	0.0195	0.353	2.1999	0.4305	0.039	2.122	0.0955
2ND QUARTILE :	0.0322	0.680	4.0018	0.5805	0.064	3.059	0.1321
3RD QUARTILE :	0.0478	0.828	4.4363	0.9940	0.081	3.726	0.2401

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WILKESPORT/CUMULATIVE PRECIP. #04

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE 1 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	10.00000
MAXIMUM	:	0.08520
MINIMUM	:	0.00210
RANGE	:	0.08310
ARITH. MEAN	:	0.02131
ARITH. STD. DEV	:	0.02512
GEOM. MEAN	:	0.01261
GEOM. STD. DEV.	:	1.08849
1ST QUARTILE	:	0.00525
2ND QUARTILE	:	0.01215
3RD QUARTILE	:	0.02201

\*\*\*\*\* : INSUFFICIENT DATA

**PART VIII**

**SUMMARY STATISTICS OF OBSERVED DEPOSITION BY REGION**

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CENTRAL REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

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	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	64.0	53.0000	55.0000	60.00	61.000	51.000	54.000
MAXIMUM :	185.0	15.5422	18.9111	813.51	94.350	92.966	57.920
MINIMUM :	4.0	0.2008	0.5040	14.20	4.840	1.560	2.000
RANGE :	181.0	15.3414	18.4071	799.31	89.510	91.406	55.920
ARITH. MEAN :	73.9	4.7092	7.0600	285.70	40.538	25.887	14.512
ARITH. STD. DEV. :	35.7	3.6086	4.5856	197.25	19.845	19.418	10.968
GEOM. MEAN :	63.5	3.3524	5.4942	213.96	35.140	18.532	11.466
GEOM. STD. DEV. :	0.6	0.9306	0.7877	0.86	0.584	0.912	0.703
1ST QUARTILE :	52.0	1.9839	3.0066	139.35	23.529	9.675	7.147
2ND QUARTILE :	72.2	3.6710	6.1427	270.06	40.412	20.880	12.633
3RD QUARTILE :	98.5	6.0201	9.2150	366.60	52.254	37.260	18.024

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CENTRAL REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	51.000	51.000	54.000	57.000	59.000	52.0000	48.0000
MAXIMUM	138.750	15.600	54.060	38.372	111.000	10.4880	0.9500
MINIMUM	1.960	0.080	0.080	0.000	1.032	0.0040	0.0390
RANGE	136.790	15.520	53.980	38.372	109.968	10.4840	0.9110
ARITH. MEAN	48.648	3.687	4.685	6.019	36.308	1.4491	0.3257
ARITH. STD. DEV	31.883	3.459	8.351	7.024	25.705	2.0383	0.2413
GEOM. MEAN	37.662	1.892	2.194	3.897	26.718	0.6573	0.2418
GEOM. STD. DEV.	0.811	1.406	1.263	0.898	0.893	1.4567	0.8307
1ST QUARTILE	22.190	0.565	0.860	2.004	14.991	0.3245	0.1410
2ND QUARTILE	38.615	2.500	2.780	3.492	29.636	0.7604	0.2600
3RD QUARTILE	68.011	5.853	4.746	7.361	53.121	1.5755	0.4332

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : CENTRAL REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

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	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	51.0000	41.000	42.0000	50.0000	51.000	42.000	40.0000
MAXIMUM :	0.2320	1.670	21.9980	2.5650	0.185	19.949	1.3734
MINIMUM :	0.0132	0.201	0.6998	0.0760	0.024	0.312	0.0434
RANGE :	0.2188	1.469	21.2982	2.4890	0.161	19.637	1.3300
ARITH. MEAN :	0.0566	0.697	4.9200	0.7133	0.081	3.482	0.2906
ARITH. STD. DEV :	0.0406	0.336	4.2292	0.4766	0.033	3.759	0.3005
GEOM. MEAN :	0.0470	0.617	3.6187	0.5673	0.074	2.252	0.1967
GEOM. STD. DEV. :	0.5991	0.518	0.7983	0.7302	0.449	0.956	0.8637
1ST QUARTILE :	0.0287	0.372	1.9208	0.3690	0.055	0.921	0.1098
2ND QUARTILE :	0.0457	0.647	3.4376	0.6280	0.077	2.476	0.1774
3RD QUARTILE :	0.0687	0.948	6.4549	0.9768	0.100	5.028	0.3074

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CENTRAL REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 4

CADMIUM

MG/M\*\*2

# OF SAMPLES	:	51.00000
MAXIMUM	:	1.06400
MINIMUM	:	0.00225
RANGE	:	1.06175
ARITH. MEAN	:	0.03809
ARITH. STD. DEV	:	0.14872
GEOM. MEAN	:	0.01111
GEOM. STD. DEV.	:	1.18294
1ST QUARTILE	:	0.00417
2ND QUARTILE	:	0.01123
3RD QUARTILE	:	0.02014

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : NORTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 81 TO JAN 9, 82

PAGE : 1

		PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		MM	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	107.0	87.0000	88.0000	94.00	94.000	88.000	91.000
MAXIMUM	:	221.2	15.7070	20.1300	780.00	73.206	110.390	40.670
MINIMUM	:	12.0	0.2701	0.7400	23.91	2.391	1.160	0.398
RANGE	:	209.2	15.4369	19.3900	756.09	70.815	109.230	40.271
ARITH. MEAN	:	68.2	3.5934	5.9588	193.73	25.357	16.529	7.971
ARITH. STD. DEV	:	42.0	2.9854	3.9244	169.22	16.950	18.911	7.151
GEOM. MEAN	:	56.8	2.5955	4.8327	138.10	20.276	10.456	5.654
GEOM. STD. DEV.	:	0.6	0.8512	0.6771	0.83	0.705	0.950	0.887
1ST QUARTILE	:	35.0	1.4859	3.4056	75.07	12.590	5.070	3.765
2ND QUARTILE	:	56.5	2.4674	4.7766	131.10	20.500	10.380	5.540
3RD QUARTILE	:	92.5	4.2305	7.3678	268.07	32.190	19.524	9.530

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : NORTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 81 TO JAN 9, 82

PAGE : 2

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	81.000	85.000	86.000	82.000	92.000	83.0000	73.0000
MAXIMUM :	156.240	20.335	49.920	25.564	95.850	39.0000	2.2240
MINIMUM :	3.760	0.115	0.115	0.290	0.094	0.0930	0.0255
RANGE :	152.480	20.220	49.805	25.274	95.756	38.9070	2.1985
ARITH. MEAN :	36.593	2.955	4.910	3.783	24.061	1.9994	0.3424
ARITH. STD. DEV :	28.672	3.525	7.677	3.531	20.394	4.9710	0.4227
GEOM. MEAN :	27.475	1.546	2.439	2.725	16.123	0.7116	0.1994
GEOM. STD. DEV. :	0.783	1.218	1.160	0.843	1.054	1.3280	1.0500
1ST QUARTILE :	14.720	0.600	0.950	1.570	8.742	0.2315	0.0915
2ND QUARTILE :	29.560	1.597	2.590	2.821	17.560	0.6180	0.2055
3RD QUARTILE :	47.850	3.535	5.275	4.755	32.005	1.9125	0.3775

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : NORTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 81 TO JAN 9, 82

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	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	74.0000	67.000	61.0000	73.0000	74.000	60.000	68.0000
MAXIMUM :	0.3990	3.487	66.8034	1.5820	0.444	70.807	1.4773
MINIMUM :	0.0140	0.112	0.3050	0.0385	0.027	0.240	0.0576
RANGE :	0.3850	3.375	66.4984	1.5435	0.417	70.566	1.4197
ARITH. MEAN :	0.0784	0.840	6.0307	0.4262	0.085	5.696	0.3122
ARITH. STD. DEV :	0.0737	0.655	10.2665	0.3061	0.058	11.540	0.2640
GEOM. MEAN :	0.0570	0.657	3.0015	0.3210	0.074	1.813	0.2403
GEOM. STD. DEV. :	0.7719	0.704	1.0734	0.8260	0.511	1.410	0.7101
1ST QUARTILE :	0.0312	0.424	1.3836	0.1940	0.051	0.539	0.1436
2ND QUARTILE :	0.0513	0.626	2.3092	0.3387	0.071	1.540	0.2318
3RD QUARTILE :	0.0955	1.074	4.9182	0.5702	0.095	3.295	0.3903

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : NORTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : JAN 5, 81 TO JAN 9, 82

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CADMIUM

MG/M\*\*2

# OF SAMPLES	:	74.00000
MAXIMUM	:	0.09040
MINIMUM	:	0.00240
RANGE	:	0.08800
ARITH. MEAN	:	0.01595
ARITH. STD. DEV	:	0.01675
GEOM. MEAN	:	0.01054
GEOM. STD. DEV.	:	0.90911
1ST QUARTILE	:	0.00460
2ND QUARTILE	:	0.01120
3RD QUARTILE	:	0.02022

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : NORTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 28, 80 TO JAN 5, 82

PAGE : 1

	PRECIP.	FREE H+	TOTAL H+	SULPHATE	NITRATE	CALCIUM	CHLORIDE
	MM	LAB MG/M**2	TO PH8.3 MG/M**2	MG/M**2	AS N MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	52.0	32.0000	39.0000	43.00	45.000	35.000	45.000
MAXIMUM :	165.0	4.5445	9.2070	239.25	31.464	60.800	13.200
MINIMUM :	6.3	0.0377	0.4890	9.75	2.275	1.183	0.135
RANGE :	158.7	4.5068	8.7180	229.50	29.189	59.617	13.065
ARITH. MEAN :	42.3	0.9793	2.2623	66.48	11.650	12.181	4.478
ARITH. STD. DEV :	30.3	0.9450	1.7082	46.85	6.824	13.075	3.388
GEOM. MEAN :	33.4	0.5745	1.7967	51.72	9.803	7.735	2.974
GEOM. STD. DEV. :	0.7	1.2270	0.6849	0.76	0.620	0.959	1.095
1ST QUARTILE :	21.4	0.4013	1.0878	37.99	6.833	3.420	2.094
2ND QUARTILE :	36.8	0.5278	1.7813	51.88	10.222	6.790	3.545
3RD QUARTILE :	54.3	1.4875	3.0073	91.50	15.588	14.622	6.311

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
API05 - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : NORTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 28, 80 TO JAN 5, 82

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	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	40.000	36.000	41.000	39.000	43.000	41.0000	33.0000
MAXIMUM :	65.600	14.285	16.800	11.550	34.480	8.1900	3.0495
MINIMUM :	4.258	0.059	0.064	0.200	1.485	0.0225	0.0200
RANGE :	61.342	14.225	16.736	11.350	32.995	8.1675	3.0295
ARITH. MEAN :	20.110	2.403	2.543	2.226	12.647	1.4197	0.3140
ARITH. STD. DEV. :	15.114	3.307	3.541	2.355	8.658	1.5936	0.5715
GEOM. MEAN :	15.587	1.119	1.167	1.522	9.922	0.7282	0.1442
GEOM. STD. DEV. :	0.724	1.316	1.285	0.851	0.738	1.3440	1.1665
1ST QUARTILE :	8.512	0.450	0.455	0.719	5.855	0.2705	0.0626
2ND QUARTILE :	14.982	1.413	0.936	1.301	10.217	0.9643	0.1260
3RD QUARTILE :	29.328	2.578	2.525	2.461	16.495	1.8305	0.2261

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : NORTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 28, 80 TO JAN 5, 82

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	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	33.0000	30.000	25.0000	33.0000	33.000	26.000	30.0000
MAXIMUM :	0.7280	0.863	10.6458	0.7500	0.165	8.969	1.4470
MINIMUM :	0.0100	0.054	0.5159	0.0237	0.020	0.195	0.0271
RANGE :	0.7180	0.808	10.1299	0.7263	0.145	8.775	1.4200
ARITH. MEAN :	0.0478	0.384	2.9841	0.2136	0.056	2.223	0.2741
ARITH. STD. DEV :	0.1231	0.250	2.5169	0.1562	0.035	2.381	0.3331
GEOM. MEAN :	0.0256	0.299	2.0761	0.1627	0.048	1.311	0.1653
GEOM. STD. DEV. :	0.7854	0.766	0.9049	0.8158	0.527	1.065	0.9863
1ST QUARTILE :	0.0165	0.140	0.9120	0.0905	0.035	0.594	0.0665
2ND QUARTILE :	0.0207	0.337	1.6706	0.1948	0.042	1.255	0.1650
3RD QUARTILE :	0.0320	0.553	4.5506	0.2649	0.064	2.753	0.2985

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : NORTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 28, 80 TO JAN 5, 82

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CADMIUM

MG/M\*\*2

# OF SAMPLES	:	32.00000
MAXIMUM	:	0.02155
MINIMUM	:	0.00100
RANGE	:	0.02055
ARITH. MEAN	:	0.00660
ARITH. STD. DEV	:	0.00589
GEOM. MEAN	:	0.00481
GEOM. STD. DEV.	:	0.77942
1ST QUARTILE	:	0.00281
2ND QUARTILE	:	0.00385
3RD QUARTILE	:	0.00812

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SOUTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

PAGE : 1

		PRECIP.	FREE H+ LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE AS N	CALCIUM	CHLORIDE
		MM	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	:	48.0	41.0000	44.0000	47.00	47.000	43.000	47.000
MAXIMUM	:	189.5	14.9806	20.2616	705.20	89.440	91.440	54.296
MINIMUM	:	12.1	0.7793	0.0000	19.32	9.860	3.090	1.760
RANGE	:	177.4	14.2013	20.2616	685.87	79.580	88.350	52.536
ARITH. MEAN	:	81.6	4.6669	7.1107	279.00	39.457	28.164	15.707
ARITH. STD. DEV	:	39.9	3.4122	4.5056	187.78	16.574	24.592	10.405
GEOM. MEAN	:	70.3	3.6012	5.8927	208.55	35.785	18.944	12.803
GEOM. STD. DEV.	:	0.6	0.7532	0.5835	0.86	0.471	0.943	0.688
1ST QUARTILE	:	56.9	1.9947	3.3047	124.56	24.518	7.779	9.653
2ND QUARTILE	:	80.7	3.7520	6.5962	266.39	37.508	19.140	13.543
3RD QUARTILE	:	104.5	5.8318	9.3939	373.45	50.820	35.301	18.793

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SOUTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

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	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	42.000	37.000	45.000	43.000	46.000	42.0000	38.0000
MAXIMUM :	236.875	20.845	34.510	37.020	96.040	21.2240	1.0000
MINIMUM :	4.094	0.267	0.303	0.340	1.854	0.0103	0.0274
RANGE :	232.781	20.578	34.206	36.680	94.186	21.2137	0.9726
ARITH. MEAN :	48.305	4.050	5.697	8.259	30.941	2.9014	0.3437
ARITH. STD. DEV. :	44.445	4.107	7.360	7.754	22.742	4.5483	0.2555
GEOM. MEAN :	33.561	2.434	3.138	5.598	22.207	1.0296	0.2419
GEOM. STD. DEV. :	0.915	1.124	1.113	0.943	0.914	1.6122	0.9639
1ST QUARTILE :	18.236	0.950	1.360	3.020	11.702	0.3351	0.1513
2ND QUARTILE :	39.565	3.393	3.165	6.052	25.931	1.1597	0.2720
3RD QUARTILE :	61.120	5.010	6.270	10.697	44.740	2.8424	0.4860

\*\*\*\*\* : INSUFFICIENT DATA



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SOUTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO JAN 5,82

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	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	38.0000	33.000	32.0000	37.0000	38.000	33.000	32.0000
MAXIMUM :	0.3750	1.752	22.1497	1.3760	0.189	16.721	1.4815
MINIMUM :	0.0129	0.113	0.6800	0.2815	0.026	0.257	0.0395
RANGE :	0.3620	1.639	21.4697	1.0945	0.164	16.464	1.4420
ARITH. MEAN :	0.0561	0.776	3.9271	0.6697	0.089	2.766	0.3494
ARITH. STD. DEV :	0.0585	0.377	4.0538	0.3096	0.040	3.407	0.3238
GEOM. MEAN :	0.0442	0.677	2.8180	0.6061	0.080	1.641	0.2513
GEOM. STD. DEV. :	0.6302	0.583	0.7952	0.4500	0.489	1.014	0.8095
1ST QUARTILE :	0.0299	0.544	1.6590	0.4200	0.059	0.808	0.1472
2ND QUARTILE :	0.0444	0.738	2.7003	0.5205	0.088	1.499	0.2279
3RD QUARTILE :	0.0617	0.908	4.4338	0.9450	0.115	2.922	0.4845

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SOUTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

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CADMIUM

MG/M\*\*2

# OF SAMPLES	:	36.00000
MAXIMUM	:	0.07600
MINIMUM	:	0.00129
RANGE	:	0.07470
ARITH. MEAN	:	0.01591
ARITH. STD. DEV	:	0.01751
GEOM. MEAN	:	0.01085
GEOM. STD. DEV.	:	0.85533
1ST QUARTILE	:	0.00626
2ND QUARTILE	:	0.01104
3RD QUARTILE	:	0.01740

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SOUTHWESTERN REGION/CUMULATIVE PRECIP.

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	PRECIP.	FREE H+	TOTAL H+	SULPHATE	NITRATE	CALCIUM	CHLORIDE
	MM	LAB MG/M**2	TO PH8.3 MG/M**2	MG/M**2	AS N MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	99.0	77.0000	85.0000	92.00	90.000	70.000	86.000
MAXIMUM	165.0	14.2557	18.4212	922.95	106.470	76.680	52.800
MINIMUM	13.0	0.5932	0.0000	48.45	5.250	3.300	1.200
RANGE	152.0	13.6625	18.4212	874.50	101.220	73.380	51.600
ARITH. MEAN	68.6	4.8610	6.9271	307.06	43.574	31.737	14.728
ARITH. STD. DEV	35.5	3.2708	4.1895	184.28	20.947	19.761	8.970
GEOM. MEAN	58.2	3.7260	5.5576	254.85	38.295	25.474	12.109
GEOM. STD. DEV.	0.6	0.7981	0.7124	0.64	0.541	0.716	0.679
1ST QUARTILE	39.5	2.6149	3.2679	174.20	26.700	14.845	8.485
2ND QUARTILE	66.5	4.1459	6.2091	268.40	39.940	27.940	13.480
3RD QUARTILE	91.0	6.4994	9.3960	405.52	59.740	42.625	18.990

\*\*\*\*\* : INSUFFICIENT DATA

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SOUTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

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	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	81.000	75.000	83.000	81.000	85.000	83.0000	79.0000
MAXIMUM :	109.560	28.800	33.000	29.040	89.460	7.9920	1.4760
MINIMUM :	5.700	0.750	0.300	0.300	4.650	0.0095	0.0300
RANGE :	103.860	28.050	32.700	28.740	84.810	7.9825	1.4460
ARITH. MEAN :	49.657	6.935	4.396	5.583	38.972	1.6287	0.3642
ARITH. STD. DEV. :	24.076	5.659	4.633	5.171	20.349	1.5981	0.2494
GEOM. MEAN :	43.489	5.242	3.078	3.877	33.122	1.0264	0.2925
GEOM. STD. DEV. :	0.555	0.767	0.853	0.906	0.622	1.0681	0.6980
1ST QUARTILE :	29.985	3.247	1.780	2.298	22.375	0.4935	0.2080
2ND QUARTILE :	47.440	5.480	3.290	4.050	37.435	1.0190	0.3000
3RD QUARTILE :	61.290	8.925	5.350	6.930	49.500	2.1280	0.4720

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SOUTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

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	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	80.0000	72.000	67.0000	78.0000	82.000	68.000	71.0000
MAXIMUM :	0.5280	7.205	20.4918	1.9800	0.165	18.097	1.3949
MINIMUM :	0.0075	0.077	0.2632	0.0205	0.015	0.236	0.0233
RANGE :	0.5205	7.129	20.2285	1.9595	0.150	17.861	1.3717
ARITH. MEAN :	0.0597	0.956	4.9479	0.6209	0.075	3.987	0.3307
ARITH. STD. DEV :	0.0722	1.060	3.8182	0.3517	0.033	3.394	0.3124
GEOM. MEAN :	0.0431	0.689	3.7164	0.5112	0.067	2.864	0.2269
GEOM. STD. DEV. :	0.7181	0.775	0.8057	0.7148	0.517	0.865	0.8854
1ST QUARTILE :	0.0269	0.512	2.1562	0.3610	0.050	1.636	0.1179
2ND QUARTILE :	0.0410	0.648	4.1735	0.5430	0.074	3.043	0.2150
3RD QUARTILE :	0.0595	0.936	6.3822	0.8335	0.095	4.715	0.3885

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS  
APIOS - ACID PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SOUTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 80 TO JAN 5, 82

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CADMIUM

MG/M\*\*2

# OF SAMPLES	:	78.00000
MAXIMUM	:	0.09000
MINIMUM	:	0.00150
RANGE	:	0.08850
ARITH. MEAN	:	0.01800
ARITH. STD. DEV	:	0.01778
GEOM. MEAN	:	0.01209
GEOM. STD. DEV.	:	0.92160
1ST QUARTILE	:	0.00622
2ND QUARTILE	:	0.01340
3RD QUARTILE	:	0.02372

\*\*\*\*\* : INSUFFICIENT DATA

PART IX

STATISTICAL DISTRIBUTION COMPARISON OF OBSERVED CONCENTRATION

**STATISTICAL DISTRIBUTION COMPARISON OF OBSERVED CONCENTRATION  
NORMALITY VS. LOG-NORMALITY**

**CENTRAL REGION**

Variable	Units	Sample Size	Critical D $\alpha = 0.05$	Observed Results			$\log_e$ (Observed Results)		
				Skewness	Kurtosis	D Statistic	Skewness	Kurtosis	D Statistic
Gauge Depth	mm	64	0.111	0.59	0.72	0.076*	-1.67	4.88	0.161
Conductance	umho/cm	54	0.120	0.88	0.36	0.115*	0.14	-0.62	0.068*
Lab pH	-	53	0.121	1.41	3.27	0.127	1.14	2.32	0.113*
Free Hydrogen (Lab)	mg/l	53	0.121	0.61	-0.01	0.107*	-1.41	3.26	0.127
Total Hydrogen	mg/l	55	0.119	0.21	-0.60	0.082*	-0.67	-0.27	0.136
Sulphate	mg/l	60	0.114	0.12	-0.76	0.087*	-1.19	1.91	0.142
Nitrate as N	mg/l	61	0.113	0.89	1.02	0.103*	-0.21	-0.11	0.079*
Calcium	mg/l	51	0.123	1.32	1.72	0.164	-0.11	-0.53	0.074*
Chloride	mg/l	54	0.120	1.97	4.32	0.232	0.19	0.04	0.117*
Magnesium	mg/l	51	0.123	1.50	2.05	0.194	-0.58	-0.43	0.150
Potassium	mg/l	54	0.120	3.12	9.97	0.291	0.69	0.25	0.137
Sodium	mg/l	57	0.117	2.80	8.32	0.216	0.27	-0.27	0.107*
Ammonium as N	mg/l	59	0.115	0.86	0.37	0.139	-0.17	-0.93	0.074*
Total Kjeldahl as N	mg/l	51	0.123	0.87	0.10	0.127	-0.15	-0.70	0.074*
Total Phosphorus	mg/l	52	0.122	2.45	6.04	0.273	-0.42	0.80	0.105*
Manganese	mg/l	48	-	1.95	4.48	-	-0.21	-0.14	-
Nickel	mg/l	51	0.123	2.72	8.30	0.380	1.59	1.83	0.413
Zinc	mg/l	48	-	1.80	4.49	-	0.20	-0.28	-
Iron	mg/l	47	-	1.40	1.43	-	0.26	-1.09	-
Lead	mg/l	50	-	1.53	2.57	-	-0.71	2.03	-
Vanadium	mg/l	51	0.123	5.65	33.12	0.536	5.28	28.15	0.538
Aluminum	mg/l	47	-	2.59	7.83	-	-0.05	-0.44	-
Copper	mg/l	48	-	2.79	9.73	-	0.39	-0.39	-
Cadmium	mg/l	51	0.123	6.64	45.73	0.408	1.58	3.85	0.161

\* D-statistic passes normality criterion



**STATISTICAL DISTRIBUTION COMPARISON OF OBSERVED CONCENTRATION  
NORMALITY VS. LOG-NORMALITY**

**NORTHEASTERN REGION**

Variable	Units	Sample Size	Critical D $\alpha = 0.05$	Observed Results			$\log_e$ (Observed Results)		
				Skewness	Kurtosis	D Statistic	Skewness	Kurtosis	D Statistic
Gauge Depth	mm	107	0.086	1.27	1.80	0.129	-0.19	-0.35	0.054*
Conductance	umho/cm	81	0.099	0.77	0.29	0.111	-0.15	-0.41	0.083*
Lab pH	-	87	0.095	1.39	2.48	0.122	1.16	1.66	0.110
Free Hydrogen (Lab)	mg/l	87	0.095	0.31	-0.51	0.061*	-1.38	2.48	0.122
Total Hydrogen	mg/l	88	0.095	0.24	-0.09	0.048*	-0.70	0.03	0.095
Sulphate	mg/l	94	0.092	0.62	-0.31	0.111	-0.71	1.50	0.055*
Nitrate as N	mg/l	94	0.092	0.60	0.13	0.080*	-1.09	2.48	0.107
Calcium	mg/l	88	0.095	1.60	1.70	0.229	0.17	-0.47	0.067*
Chloride	mg/l	91	0.093	1.94	5.07	0.155	-0.90	1.19	0.132
Magnesium	mg/l	85	0.096	1.44	1.59	0.197	-0.34	-0.80	0.109
Potassium	mg/l	86	0.096	2.65	7.01	0.232	0.23	-0.03	0.114
Sodium	mg/l	82	0.098	3.22	14.10	0.213	-0.07	0.04	0.094*
Ammonium as N	mg/l	92	0.093	0.76	0.06	0.114	-3.04	14.93	0.129
Total Kjeldahl as N	mg/l	81	0.099	1.44	2.92	0.127	-0.67	1.58	0.062*
Total Phosphorus	mg/l	83	0.097	3.94	16.40	0.322	0.36	0.44	0.085*
Manganese	mg/l	73	0.104	1.96	3.08	0.251	-0.03	-0.50	0.119
Nickel	mg/l	74	0.103	2.60	7.50	0.344	1.32	0.51	0.389
Zinc	mg/l	70	0.106	2.94	11.04	0.196	0.26	-0.07	0.088*
Iron	mg/l	64	0.111	2.72	8.55	0.245	0.52	0.04	0.118
Lead	mg/l	73	0.104	0.44	-0.23	0.132	-1.09	0.93	0.174
Vanadium	mg/l	74	0.103	6.76	49.48	0.530	5.71	34.64	0.536
Aluminum	mg/l	63	0.111	3.35	12.18	0.306	0.72	-0.07	0.121
Copper	mg/l	71	0.105	3.28	15.79	0.167	0.11	0.20	0.050*
Cadmium	mg/l	74	0.103	2.26	6.11	0.235	0.32	-1.07	0.217

\* D-statistic passes normality criterion

**STATISTICAL DISTRIBUTION COMPARISON OF OBSERVED CONCENTRATION  
NORMALITY VS. LOG-NORMALITY**

**NORTHWESTERN REGION**

Variable	Units	Sample Size	Critical D $\alpha = 0.05$	Observed Results			$\log_e$ (Observed Results)		
				Skewness	Kurtosis	D Statistic	Skewness	Kurtosis	D Statistic
Gauge Depth	mm	52	0.086	1.78	4.46	0.143	-0.37	0.24	0.079*
Conductance	umho/cm	31	-	0.95	0.28	-	0.39	-0.63	-
Lab pH	-	32	-	1.50	1.87	-	1.29	1.15	-
Free Hydrogen (Lab)	mg/l	32	-	0.14	-1.20	-	-1.50	1.87	-
Total Hydrogen	mg/l	39	-	0.41	-1.04	-	-0.03	-1.27	-
Sulphate	mg/l	43	-	1.18	0.77	-	-0.13	0.07	-
Nitrate as N	mg/l	45	-	0.66	-0.56	-	-0.20	-0.65	-
Calcium	mg/l	35	-	1.40	1.52	-	0.02	-0.88	-
Chloride	mg/l	45	-	3.16	12.52	-	-0.88	1.38	-
Magnesium	mg/l	36	-	3.36	14.03	-	-0.06	-0.27	-
Potassium	mg/l	41	-	1.67	2.09	-	0.21	-0.74	-
Sodium	mg/l	39	-	2.56	8.76	-	0.33	0.22	-
Ammonium as N	mg/l	43	-	1.30	0.67	-	0.18	-0.29	-
Total Kjeldahl as N	mg/l	40	-	1.03	0.31	-	-0.04	-0.50	-
Total Phosphorus	mg/l	41	-	1.04	0.50	-	-0.95	0.64	-
Manganese	mg/l	33	-	4.94	25.95	-	0.72	1.69	-
Nickel	mg/l	33	-	5.44	30.26	-	4.50	20.83	-
Zinc	mg/l	33	-	0.79	0.41	-	-0.30	-0.74	-
Iron	mg/l	28	-	1.25	1.41	-	-1.10	-1.04	-
Lead	mg/l	33	-	0.59	-0.29	-	-0.99	0.99	-
Vanadium	mg/l	33	-	5.29	28.88	-	4.71	23.01	-
Aluminum	mg/l	29	-	1.68	2.90	-	-0.06	-0.70	-
Copper	mg/l	33	-	1.76	2.37	-	0.56	-0.80	-
Cadmium	mg/l	32	-	1.95	3.74	-	0.62	-0.49	-

\* D-statistic passes normality criterion

**STATISTICAL DISTRIBUTION COMPARISON OF OBSERVED CONCENTRATION  
NORMALITY VS. LOG-NORMALITY**

**SOUTHEASTERN REGION**

Variable	Units	Sample Size	Critical D $\alpha = 0.05$	Observed Results			log <sub>e</sub> (Observed Results)		
				Skewness	Kurtosis	D Statistic	Skewness	Kurtosis	D Statistic
Gauge Depth	mm	48	-	0.44	0.18	-	-1.02	0.83	-
Conductance	umho/cm	43	-	0.20	-0.66	-	-0.65	0.32	-
Lab pH	-	41	-	1.47	1.89	-	1.32	1.48	-
Free Hydrogen (Lab)	mg/l	41	-	0.00	-0.19	-	-1.47	1.89	-
Total Hydrogen	mg/l	44	-	-0.39	0.04	-	-0.89	-0.31	-
Sulphate	mg/l	47	-	-0.05	-1.14	-	-1.81	5.63	-
Nitrate as N	mg/l	47	-	1.47	2.05	-	0.17	0.76	-
Calcium	mg/l	43	-	0.82	-0.54	-	-0.30	-0.71	-
Chloride	mg/l	47	-	1.29	1.15	-	-0.03	-0.60	-
Magnesium	mg/l	37	-	1.97	4.98	-	-0.23	-0.36	-
Potassium	mg/l	45	-	2.90	9.00	-	0.21	0.59	-
Sodium	mg/l	43	-	1.67	2.68	-	-0.04	-0.79	-
Ammonium as N	mg/l	46	-	0.87	0.47	-	-0.41	-0.27	-
Total Kjeldahl as N	mg/l	42	-	0.98	0.08	-	0.12	-0.88	-
Total Phosphorus	mg/l	42	-	2.22	5.57	-	-0.26	0.04	-
Manganese	mg/l	38	-	1.89	3.95	-	-0.40	0.02	-
Nickel	mg/l	38	-	5.04	27.86	-	3.51	13.82	-
Zinc	mg/l	36	-	0.92	0.19	-	0.12	-0.77	-
Iron	mg/l	35	-	3.44	12.05	-	1.23	1.40	-
Lead	mg/l	37	-	0.77	0.20	-	-0.01	-0.30	-
Vanadium	mg/l	38	-	6.16	38.00	-	6.16	38.00	-
Aluminum	mg/l	36	-	3.62	14.23	-	0.89	0.60	-
Copper	mg/l	37	-	2.38	6.87	-	0.28	-0.65	-
Cadmium	mg/l	36	-	2.50	6.70	-	0.73	-0.34	-

\* D-statistic passes normality criterion

**STATISTICAL DISTRIBUTION COMPARISON OF OBSERVED CONCENTRATION  
NORMALITY VS. LOG-NORMALITY**

**SOUTHWESTERN REGION**

Variable	Units	Sample Size	Critical D $\alpha = 0.05$	Observed Results			log <sub>e</sub> (Observed Results)		
				Skewness	Kurtosis	D Statistic	Skewness	Kurtosis	D Statistic
Gauge Depth	mm	99	0.089	0.37	-0.51	0.078*	-0.68	-0.35	0.116
Conductance	umho/cm	86	0.096	0.75	0.00	0.138	-0.09	-0.29	0.065*
Lab pH	-	77	0.101	0.87	1.58	0.070*	0.65	1.02	0.063*
Free Hydrogen (Lab)	mg/l	77	0.101	0.66	-0.04	0.122	-0.87	1.58	0.070*
Total Hydrogen	mg/l	85	0.096	0.27	0.14	0.080*	-0.61	0.19	0.104
Sulphate	mg/l	92	0.093	0.83	0.01	0.120	0.09	-0.80	0.056*
Nitrate as N	mg/l	90	0.094	1.16	0.99	0.139	0.40	-0.51	0.067*
Calcium	mg/l	70	0.106	0.67	-0.49	0.160	-0.29	-0.30	0.076*
Chloride	mg/l	86	0.096	2.15	5.56	0.205	-0.34	0.97	0.079*
Magnesium	mg/l	75	0.102	1.56	2.22	0.135	-0.24	-0.08	0.085*
Potassium	mg/l	83	0.097	3.28	15.73	0.211	-0.11	0.24	0.127
Sodium	mg/l	81	0.099	2.25	5.78	0.200	-0.09	-0.50	0.144
Ammonium as N	mg/l	85	0.096	1.71	3.96	0.183	-0.35	1.19	0.080*
Total Kjeldahl as N	mg/l	81	0.099	1.77	4.65	0.175	0.21	-0.15	0.086*
Total Phosphorus	mg/l	83	0.097	4.36	27.03	0.211	-4.10	1.84	0.084*
Manganese	mg/l	79	0.100	1.98	5.07	0.174	0.17	-0.13	0.149
Nickel	mg/l	80	0.099	2.63	6.36	0.461	1.96	2.43	0.478
Zinc	mg/l	80	0.099	3.02	11.54	0.213	0.51	0.29	0.091*
Iron	mg/l	75	0.102	1.57	3.11	0.155	-0.14	-0.06	0.058*
Lead	mg/l	78	0.100	0.88	1.86	0.128	-1.70	5.87	0.195
Vanadium	mg/l	82	0.098	6.66	44.92	0.537	6.47	41.66	0.537
Aluminum	mg/l	76	0.102	4.41	26.56	0.199	-0.15	0.67	0.079*
Copper	mg/l	81	0.099	1.08	0.15	0.183	0.07	-1.12	0.083*
Cadmium	mg/l	78	0.100	3.60	17.79	0.235	0.14	-0.27	0.175

\* D-statistic passes normality criterion

**PART X**

**STATISTICAL DISTRIBUTION COMPARISON OF OBSERVED DEPOSITION**

**STATISTICAL DISTRIBUTION COMPARISON OF OBSERVED DEPOSITION  
NORMALITY VS. LOG-NORMALITY**

**CENTRAL REGION**

Variable	Units	Sample Size	Critical D $\alpha = 0.05$	Observed Results			log <sub>e</sub> (Observed Results)		
				Skewness	Kurtosis	D Statistic	Skewness	Kurtosis	D Statistic
Free Hydrogen (Lab)	mg/m**2	53	0.121	1.15	0.90	0.135	-0.82	0.79	0.086*
Total Hydrogen	mg/m**2	55	0.119	0.85	0.26	0.107*	-0.80	0.54	0.131
Sulphate	mg/m**2	60	0.114	0.94	0.43	0.151	-0.90	0.88	0.137
Nitrate as N	mg/m**2	61	0.113	0.47	-0.09	0.077*	-0.91	1.03	0.124
Calcium	mg/m**2	51	0.123	1.08	1.38	0.126	-0.63	-0.10	0.133
Chloride	mg/m**2	54	0.120	2.12	5.63	0.177	-0.14	0.10	0.084*
Magnesium	mg/m**2	51	0.123	1.22	1.70	0.149	-0.70	-0.59	0.136
Potassium	mg/m**2	54	0.120	4.67	24.89	0.291	-0.18	0.41	0.099*
Sodium	mg/m**2	57	0.117	2.85	9.32	0.218	0.27	0.02	0.055*
Ammonium as N	mg/m**2	59	0.115	0.92	0.36	0.112*	-1.01	1.75	0.081*
Total Kjeldahl as N	mg/m**2	51	0.123	0.88	0.30	0.149	-1.09	2.30	0.107*
Total Phosphorus	mg/m**2	52	0.122	2.84	8.89	0.244	-0.94	2.19	0.096*
Manganese	mg/m**2	48	-	1.05	0.48	-	-0.35	-0.67	-
Nickel	mg/m**2	51	0.123	2.45	7.79	0.173	0.29	0.32	0.056*
Zinc	mg/m**2	48	-	1.13	2.33	-	-0.56	0.42	-
Iron	mg/m**2	47	-	1.92	4.55	-	0.10	-0.65	-
Lead	mg/m**2	50	-	1.49	3.57	-	-0.59	0.29	-
Vanadium	mg/m**2	51	0.123	0.66	0.81	0.090*	-0.62	0.35	0.090*
Aluminum	mg/m**2	47	-	2.92	10.91	-	0.05	-0.48	-
Copper	mg/m**2	48	-	2.31	5.58	-	0.55	-0.30	-
Cadmium	mg/m**2	51	0.123	6.84	47.88	0.421	1.32	3.25	0.101*

\* D-statistic passes normality criterion

**STATISTICAL DISTRIBUTION COMPARISON OF OBSERVED DEPOSITION  
NORMALITY VS. LOG-NORMALITY**

**NORTHEASTERN REGION**

Variable	Units	Sample Size	Critical D $\alpha = 0.05$	Observed Results			$\log_e$ (Observed Results)		
				Skewness	Kurtosis	D Statistic	Skewness	Kurtosis	D Statistic
Free Hydrogen (Lab)	mg/m**2	87	0.095	1.60	2.71	0.191	-0.35	0.17	0.063*
Total Hydrogen	mg/m**2	88	0.095	1.34	1.75	0.167	-0.38	0.37	0.071*
Sulphate	mg/m**2	94	0.092	1.54	1.83	0.198	0.13	-0.71	0.074*
Nitrate as N	mg/m**2	94	0.092	1.15	0.66	0.145	-0.45	0.55	0.039*
Calcium	mg/m**2	88	0.095	2.66	8.35	0.222	0.16	-0.13	0.043*
Chloride	mg/m**2	91	0.093	2.42	7.79	0.189	-0.57	0.87	0.105
Magnesium	mg/m**2	85	0.096	2.31	6.88	0.210	-0.14	-0.68	0.053*
Potassium	mg/m**2	86	0.096	3.60	15.59	0.266	0.22	-0.01	0.053*
Sodium	mg/m**2	82	0.098	3.33	17.26	0.161	-0.32	0.36	0.062*
Ammonium as N	mg/m**2	92	0.093	1.49	2.23	0.132	-1.51	5.53	0.081*
Total Kjeldahl as N	mg/m**2	81	0.099	1.58	3.10	0.138	-0.11	-0.49	0.050*
Total Phosphorus	mg/m**2	83	0.097	5.96	40.34	0.351	0.53	-0.05	0.107
Manganese	mg/m**2	73	0.104	2.70	8.04	0.236	0.09	-0.36	0.052*
Nickel	mg/m**2	74	0.103	2.18	5.19	0.208	0.48	-0.32	0.095*
Zinc	mg/m**2	70	0.106	2.52	7.75	0.182	0.24	0.16	0.064*
Iron	mg/m**2	64	0.111	4.14	21.49	0.336	0.82	0.52	0.127
Lead	mg/m**2	73	0.104	1.28	1.97	0.134	-0.64	0.15	0.123
Vanadium	mg/m**2	74	0.103	3.68	19.97	0.181	0.57	1.13	0.065*
Aluminum	mg/m**2	63	0.111	3.84	18.15	0.351	0.78	-0.02	0.119
Copper	mg/m**2	71	0.105	2.39	6.92	0.194	0.33	-0.13	0.076*
Cadmium	mg/m**2	74	0.103	2.62	8.73	0.209	0.23	-0.76	0.098*

\* D-statistic passes normality criterion

**STATISTICAL DISTRIBUTION COMPARISON OF OBSERVED DEPOSITION  
NORMALITY VS. LOG-NORMALITY**

**NORTHWESTERN REGION**

Variable	Units	Sample Size	Critical D $\alpha = 0.05$	Observed Results			$\log_e$ (Observed Results)		
				Skewness	Kurtosis	D Statistic	Skewness	Kurtosis	D Statistic
Free Hydrogen (Lab)	mg/m**2	32	-	1.95	5.38	-	-0.85	0.26	-
Total Hydrogen	mg/m**2	39	-	2.11	6.34	-	0.12	-0.43	-
Sulphate	mg/m**2	43	-	1.50	3.18	-	-0.51	-0.02	-
Nitrate as N	mg/m**2	45	-	1.14	1.40	-	-0.42	0.01	-
Calcium	mg/m**2	35	-	2.11	4.96	-	0.26	-0.62	-
Chloride	mg/m**2	45	-	0.84	0.02	-	-1.14	1.02	-
Magnesium	mg/m**2	36	-	2.41	5.71	-	-0.08	-0.42	-
Potassium	mg/m**2	41	-	2.32	5.94	-	0.12	-0.27	-
Sodium	mg/m**2	39	-	2.42	6.33	-	0.35	0.28	-
Ammonium as N	mg/m**2	43	-	0.96	-0.02	-	-0.31	-0.28	-
Total Kjeldahl as N	mg/m**2	40	-	1.33	1.28	-	0.17	-0.88	-
Total Phosphorus	mg/m**2	41	-	2.27	7.14	-	-0.67	0.34	-
Manganese	mg/m**2	33	-	3.88	17.03	-	0.59	0.39	-
Nickel	mg/m**2	33	-	5.60	31.82	-	2.55	9.68	-
Zinc	mg/m**2	33	-	1.15	1.46	-	-0.24	-0.77	-
Iron	mg/m**2	28	-	1.25	1.46	-	-0.02	-1.22	-
Lead	mg/m**2	33	-	1.76	4.37	-	-0.69	0.30	-
Vanadium	mg/m**2	33	-	1.90	3.94	-	0.51	0.04	-
Aluminum	mg/m**2	29	-	1.64	1.94	-	0.23	-0.63	-
Copper	mg/m**2	33	-	2.55	6.68	-	0.54	-0.19	-
Cadmium	mg/m**2	32	-	1.56	1.35	-	0.48	-0.42	-

\* D-statistic passes normality criterion



**STATISTICAL DISTRIBUTION COMPARISON OF OBSERVED DEPOSITION  
NORMALITY VS. LOG-NORMALITY**

**SOUTHEASTERN REGION**

Variable	Units	Sample Size	Critical D $\alpha = 0.05$	Observed Results			$\log_e$ (Observed Results)		
				Skewness	Kurtosis	D Statistic	Skewness	Kurtosis	D Statistic
Free Hydrogen (Lab)	mg/m**2	41	-	1.26	1.14	-	-0.16	-0.55	-
Total Hydrogen	mg/m**2	44	-	1.05	0.67	-	0.16	-0.97	-
Sulphate	mg/m**2	47	-	0.64	-0.49	-	-0.79	0.13	-
Nitrate as N	mg/m**2	47	-	0.52	0.53	-	-0.71	0.35	-
Calcium	mg/m**2	43	-	1.15	0.33	-	-0.10	-0.93	-
Chloride	mg/m**2	47	-	1.86	4.55	-	-0.75	1.54	-
Magnesium	mg/m**2	37	-	2.27	7.03	-	-0.41	-0.67	-
Potassium	mg/m**2	45	-	2.60	7.03	-	0.06	-0.17	-
Sodium	mg/m**2	43	-	1.97	4.37	-	-0.44	0.75	-
Ammonium as N	mg/m**2	46	-	0.87	0.25	-	-0.68	0.06	-
Total Kjeldahl as N	mg/m**2	42	-	2.37	7.49	-	-0.41	0.15	-
Total Phosphorus	mg/m**2	42	-	2.63	7.20	-	-0.40	0.41	-
Manganese	mg/m**2	38	-	0.99	0.64	-	-0.79	-0.09	-
Nickel	mg/m**2	38	-	4.62	24.98	-	0.80	2.51	-
Zinc	mg/m**2	36	-	1.09	1.51	-	-1.01	2.16	-
Iron	mg/m**2	35	-	3.44	13.16	-	0.64	0.57	-
Lead	mg/m**2	37	-	0.75	-0.60	-	0.24	-1.20	-
Vanadium	mg/m**2	38	-	0.53	-0.23	-	-0.43	-0.34	-
Aluminum	mg/m**2	36	-	3.79	16.46	-	0.48	0.17	-
Copper	mg/m**2	37	-	2.15	5.04	-	0.42	-0.03	-
Cadmium	mg/m**2	36	-	2.55	6.07	-	0.24	0.84	-

\* D-statistic passes normality criterion

**STATISTICAL DISTRIBUTION COMPARISON OF OBSERVED DEPOSITION  
NORMALITY VS. LOG-NORMALITY**

**SOUTHWESTERN REGION**

Variable	Units	Sample Size	Critical D $\alpha = 0.05$	Observed Results			log <sub>e</sub> (Observed Results)		
				Skewness	Kurtosis	D Statistic	Skewness	Kurtosis	D Statistic
Free Hydrogen (Lab)	mg/m**2	77	0.101	0.85	0.16	0.108	-0.58	-0.31	0.089*
Total Hydrogen	mg/m**2	85	0.096	0.58	-0.35	0.086*	-0.81	0.64	0.085*
Sulphate	mg/m**2	92	0.093	1.02	0.88	0.115	-0.35	-0.33	0.053*
Nitrate as N	mg/m**2	90	0.094	0.55	-0.26	0.105	-0.70	0.83	0.069*
Calcium	mg/m**2	70	0.106	0.74	-0.31	0.110	-0.59	0.17	0.079*
Chloride	mg/m**2	86	0.096	1.42	3.53	0.085*	-0.79	1.09	0.094*
Magnesium	mg/m**2	75	0.102	1.97	4.44	0.184	-0.13	0.03	0.044*
Potassium	mg/m**2	83	0.097	3.73	18.79	0.204	-0.10	0.32	0.072*
Sodium	mg/m**2	81	0.099	2.41	7.73	0.184	-0.43	0.46	0.061*
Ammonium as N	mg/m**2	85	0.096	0.52	-0.33	0.079*	-0.82	0.54	0.105
Total Kjeldahl as N	mg/m**2	81	0.099	-0.86	1.42	0.113	-0.86	1.42	0.113
Total Phosphorus	mg/m**2	83	0.097	1.88	4.14	0.204	-0.91	3.15	0.060*
Manganese	mg/m**2	79	0.100	1.77	4.67	0.145	-0.49	0.76	0.101
Nickel	mg/m**2	80	0.099	4.32	23.37	0.294	0.93	1.79	0.117
Zinc	mg/m**2	80	0.099	4.07	20.73	0.260	0.24	1.18	0.095*
Iron	mg/m**2	75	0.102	1.78	4.08	0.149	-0.36	0.52	0.068*
Lead	mg/m**2	78	0.100	0.98	1.78	0.117	-1.51	4.56	0.098*
Vanadium	mg/m**2	82	0.098	0.36	-0.31	0.052*	-0.84	0.59	0.095*
Aluminum	mg/m**2	76	0.102	2.00	4.78	0.193	-0.27	0.21	0.068*
Copper	mg/m**2	81	0.099	1.99	3.99	0.196	0.13	-0.49	0.052*
Cadmium	mg/m**2	78	0.100	2.32	6.25	0.178	-0.11	-0.31	0.056*

\* D-statistic passes normality criterion

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